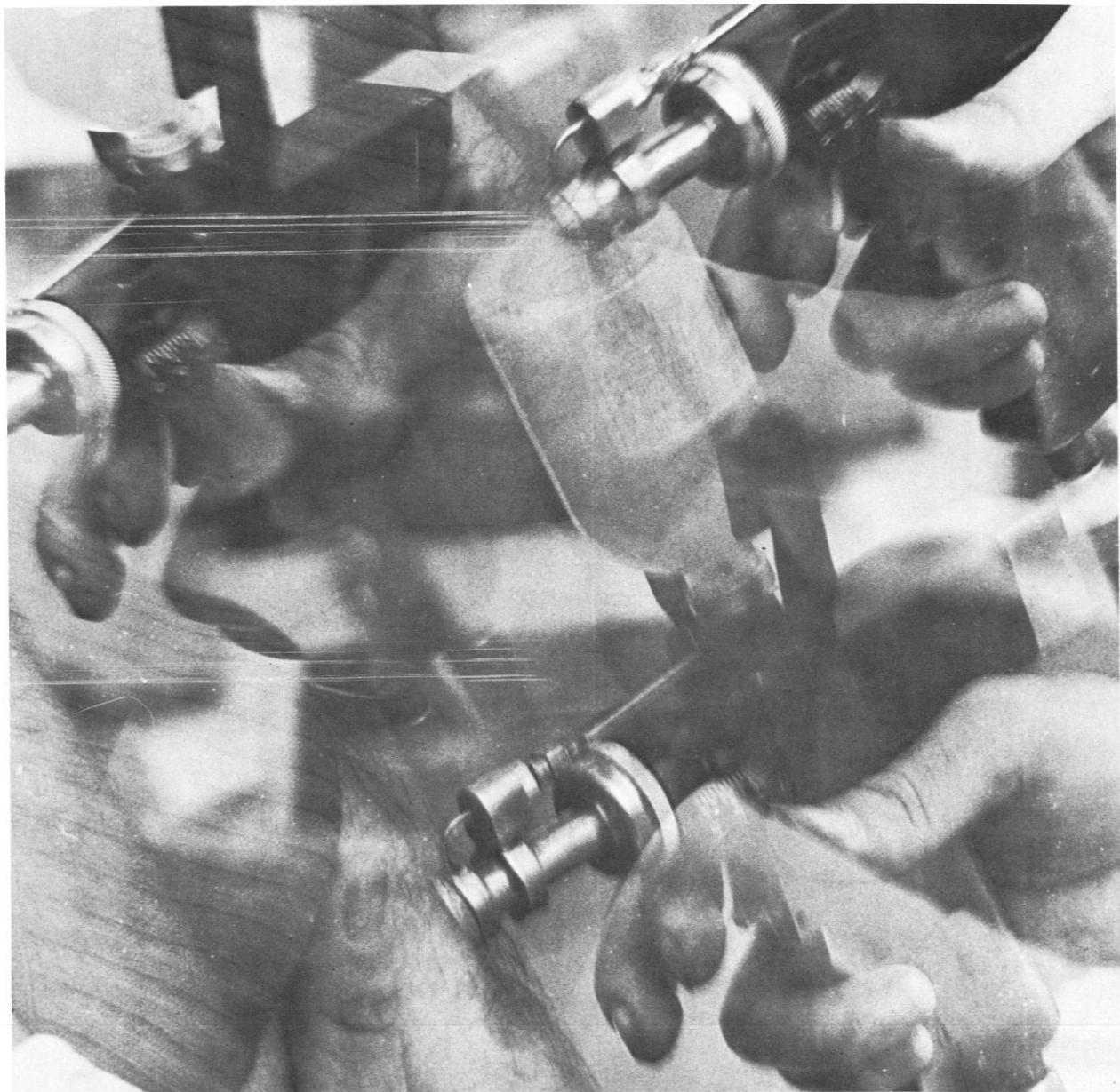




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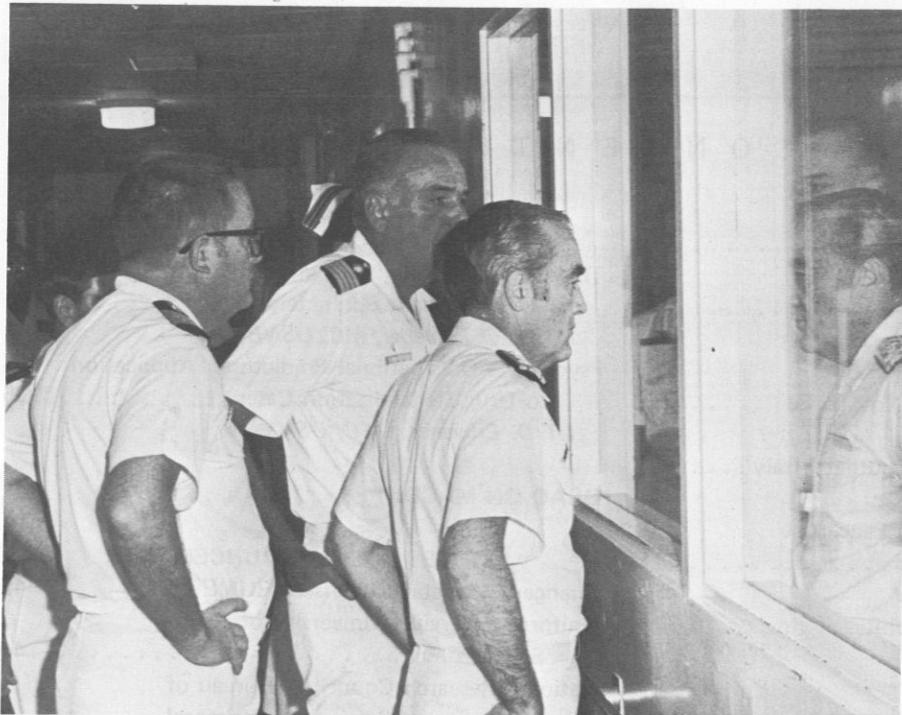
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Featured on the front cover is the jet-injection apparatus recently employed for mass immunization during the cholera outbreak in Naples, Italy. For further details, see the feature article, "Cannons for Peace" on page 9.

The page 2 photo of the Surgeon General, VADM Donald L. Custis, MC, USN was kindly provided by the U.S. Naval Hospital Guam, M.I.

The continued support of the Illustrations and Exhibits, and the Photography Divisions of the Media Department, Naval Medical Training Institute, NNMC, Bethesda, Md., is gratefully acknowledged.



from the Chief

Last month, you will recall, I reemphasized the need for better communication with our patients. Now, because of some very unfortunate examples, it is timely to discuss communication with the news media.

The Navy recognizes the right of the public to be fully informed on defense activities as long as this information is not classified, is accurate, and in good taste. We cannot afford to withdraw from contact with the press. At the same time every precaution must be taken to avoid the misunderstandings and misquotations which lead to erroneous coverage. To this end there are regulations and procedures which commanding officers can ill afford to ignore.

Basic requirements dealing with the release of news, whether feature or hot news, are covered in Article D1304 of U.S. Navy Public Affairs Regulations.

At the field level, commanding officers and officers-in-charge are authorized to release information or arrange interviews concerning news of purely local interest only. This includes responses to inquiries where a delay might be adverse to the best interest of the Navy.

Commands are reminded of the requirement to notify the Chief of Naval Information (CHINFO), via the chain of command, when they receive from the media interview requests that could result in national coverage and/or adverse coverage. If in doubt as to what to release or

what to authorize, BUMED consultation should be sought. Article F1019 of the U.S. Navy Public Affairs Regulations lists the types of information that may not be released on exclusively local authority. All are based on considerations of security, accuracy, policy, and propriety.

Additionally, there is the necessity to keep concerned commands, the Surgeon General, and the Chief of Naval Information advised of any unexpected nonroutine event concerning which national interest might evolve, regardless of whether its initial news coverage was governed by mandatory referral to higher authority.

You will find the CHINFO staff can be of considerable assistance to you, even to the extent of furnishing, if needed, a qualified PA specialist. Public Affairs Officers on the staff of the district commandants or fleet/force commanders are also available to help prevent media complications, or assist in responding to media queries.

If the reporter does not object, you will find it desirable, whenever possible, for interview proceedings to be recorded verbatim on tape for your own record as well as to assist the newsman. A reporter is not required to submit prepublished copy for review unless there is a question of security involved. Even then, it should be agreed upon in advance. Ideally a Public Affairs Officer should be present to assist at any news conference or "feature" interview.

In spite of your best effort, should false or distorted information concerning the Navy be published or broadcast by media, do not issue denials or demand retractions. Report the situation to BUMED and CHINFO instead, and wait for guidance.

There are several ways to advise the Bureau: by phone if it is "hot," by message if you need some assistance rapidly, or by mail if it is of a more routine nature. My Aide, LCDR Jim Erie, has collateral duty as my PA Officer, and I can assure you he stands ready to help. He may be reached on any of these phone numbers: Autovon 294-4153, -4161, or -4186; commercial AC 202, 254-4153, -4161, or -4186.

The Bureau also has telecopier capability, and written information may be transmitted by calling Commercial 254-4159, or Autovon 294-4159.

Have a good press.



MILITARY PSYCHIATRY -

To Be Or Not To Be

By LCDR Bryan D. Spader, MC, USN,

Chief of Psychiatry, Naval Hospital,

Portsmouth, New Hampshire.

There are two opposing views being expressed about military psychiatry. On the one hand, military psychiatry is credited with being the source of most modern psychiatric-treatment methods. Military experience is even thought by some to have strongly influenced the thought, theories and terminology of Freud himself.¹ On the other hand, military psychiatry is considered by others to be so different from general psychiatry, that experience in the military has no relevance to psychiatry practiced elsewhere.

CONTRIBUTIONS OF MILITARY PSYCHIATRY

The first view is well represented in a review article by Brown.² He states that in the 1940s and 1950s, important innovations in psychiatry were initiated in the military service. Many of the therapeutic approaches popular today began as experiments in the military — i.e., therapeutic community, group therapy, psychiatric screening as a preventive measure, treatment of acute-stress reaction, short-term psychotherapy, and community psychiatry. More recently contributions have been made in developing techniques for selecting men for active duty and special assignments, in understanding

the physiological correlates of stress, sleep deprivation, epidemiology of mental illness, and social and preventive psychiatric approaches.^{3,4} Contributions to psychiatry have continued to flow from psychiatrists on active duty during the Vietnam era. There has been further exploration in the management and treatment of character disorders,⁵ continuing interest in preventive and community psychiatry,^{6,7,8} and new approaches to psychiatric evaluation and treatment of special occupational groups such as fighter pilots,⁹ and those with security clearance.¹⁰ Presently military psychiatrists are in a position to make unique, significant contributions in the Department of Defense (DOD) programs for treatment of drug abuse¹¹ and alcoholism.¹²

ANOTHER VIEW

In spite of the many research and clinical contributions of military psychiatrists, the popularity and influence of military psychiatry has diminished in the Vietnam era. Demonstrations against psychiatrists on active duty have been observed at annual meetings of the American Psychiatric Association. Journal articles, and letters published in *Psychiatric News* have questioned the claimed potential for important psychiatric contributions by military psychiatry. Friedman¹³ questions the conclusion one might reach from review of the literature, that application of the community approach has resulted in a highly effective method of handling psychiatric problems in the military organization. He feels that there is a mystique in the military wherein

The opinions or assertions contained herein are those of the author and are not to be construed as official or reflecting the views of the Navy Department or the naval service at large.

The above paper was read by Dr. Spader at the 1973 Navy Psychiatry Seminar held in conjunction with the Annual Meeting of the American Psychiatric Association in Honolulu.

one accepts current practices as effective and well conceived, that critical statements are practically nonexistent, and that military psychiatry has increasingly institutionalized practices and positions that are radically different from those generally accepted in civilian practice. He expresses concern that, since so many psychiatrists are subjected to a tour of duty, clinical psychiatry may be significantly affected. "In the military it is possible for the hard-earned principles of three years of residency to succumb to the vigorous hard-sell of the indoctrination of military psychiatrists...." He asserts that psychiatrists on active duty are discouraged from providing individual psychotherapy, are encouraged to abandon personality configuration as a determinant in favor of group forces, and that the emphasis is placed on reaching the commanding officer and not the patient. He concludes with the suggestion that psychiatrists need to reevaluate their participation in the military as "captive professionals."

Hesul,¹⁴ in a letter published in *Psychiatric News* offers the opinion that it is not inevitable that three years of residency are lost to the military hard-sell. Rather, the *intelligent, circumspect* psychiatrist is often able to put his patient's interests above the organization's demands. Bey,¹⁵ in a later letter that appeared in *Psychiatric News* criticizes several of Dr. Friedman's assertions, but cautions that judging military-psychiatric techniques, methods, and goals by civilian standards is like comparing apples and oranges. He concurs with the suggestion made by Barr¹⁶ that the term military psychiatrist be dropped in favor of the term psychiatric military officers (PMOs), in the interest of clarifying the role conflicts of the psychiatrist while in the military service. In addition to coining the term PMO, Barr designates eight factors which differentiate *psychiatric military duty* from the traditional form of psychiatry: allegiance to military service rather than to the patient, lack of confidentiality in the military, distortion of transference by presence of the psychiatrist as an officer in uniform, concern for the primary objective of getting the patient back to duty rather than in manipulating his environment, the temptation to confuse the patient's frustrations with his own, the exertion of significant control over the career and life of patients by the PMO, the secondary gain from symptoms of military patients, and the PMO risk of drawing research conclusions that may not apply to civilian practice.

DISCUSSION

It is true that a military psychiatrist is both a military officer and a psychiatrist. The term military psychiatrist adequately encompasses both roles, however,

and I question the need for a new term. Psychiatrists in the military are able to treat their patients with individual psychotherapy, group therapy, milieu therapy, work therapy, drugs, and almost any indicated psychiatric treatment. However, in establishing a treatment plan the psychiatrist must consider his own treatment resources, and his patient's job. This is hardly a revelation to the clinical psychiatrist who works in a community mental-health center, or other organization, concerned with the delivery of health care (in this case psychiatric) to a defined population or catchment area. Sometimes the demands imposed on a patient by his job are such that he is unavailable for outpatient treatment. In such a case the psychiatrist must assess the severity of the disorder, and the urgency of treatment. The psychiatrist may conclude that treatment is elective, in which case he would not interfere with the man's job. However, if treatment is a must, the psychiatrist may recommend that the patient's work obligation be suspended in order that appropriate treatment might be instituted. In the military this is probably easier to accomplish than in civilian life. All the military psychiatrist need do is declare the patient unfit to perform his duties; the patient will be admitted to a psychiatric ward for further evaluation, treatment as indicated, and arrival at a rational decision concerning return to duty or discharge from the service. The submariner who is at sea for extended periods, and who may never be in one place long enough for any extensive outpatient treatment, is an example of the military candidate for hospital management. The patients who would ordinarily require removal from their jobs are those who present psychosis, disabling neurosis, organic brain disease, some severe character disorders, alcoholism, and drug dependency requiring rehabilitation. Except for transporting the patient long distances to the nearest hospital if he is in a remote area, such an approach is hardly peculiar to the military. However, unique demands are placed on psychiatrists in a war zone. In the latter setting, changing needs of the military mission and the intensity of battle may markedly modify the patient load and the possible treatment approaches. Bloch¹⁷ thoroughly discusses military-psychiatric treatment in Vietnam. The principles of immediacy, proximity and expectancy, and the pragmatic goal of preserving the fighting strength as applied to the management and treatment of psychiatric casualties in Vietnam, appear to have resulted in a marked decrease in psychiatric disability as compared with WWII and Korea. The marked reduction in psychiatric casualties would seem to be in the best interest of the military organization, and of the individual soldier. At times the demands of the military mission required immediate disposition of all hospitalized

psychiatric patients, to make room for increased battle casualties which were anticipated. Yet even in this extreme situation, individual psychodynamics were an important part of the psychiatric evaluation. If further treatment were necessary, the patient was evacuated to a treatment setting located outside of the war zone. Only those individuals who were considered to have transient symptomatology and who were judged capable, were returned to battle.

In the military, psychiatric hospital-techniques of treatment are quite similar to those utilized in civilian practice. Most of the treatment and evaluation methods employed in the treatment of dependents and retired military patients, in military outpatient clinics, approximate those applied in the civilian sector.

THE MAJOR AREA OF CONFLICT

Even in the less demanding environment outside the war zone, it is the active-duty patients who do not require hospitalization that the military psychiatrist must relate most directly to military structure. It is, in my opinion, this class of patients that presents the major dilemma for the psychiatrist in the military. These are the individuals who come to the psychiatrist and complain of nervousness, tension, unhappiness, self-destructive thoughts, etc. Often they blame their symptoms on their own leaders, their duties, or the military organization in general. They may contend that if the psychiatrist could change some aspect of their environment, or get them out of the service, they would no longer have symptoms. Now, there is no problem if these individuals, in the psychiatrist's opinion require hospitalization. The psychiatrist arranges for hospital admission, and it is done. The problem, or potential problem is presented by those persons who may have symptoms, and who definitely have expectations of the psychiatrist, but who are responsible for their own actions and behavior. Since they do not require hospital admission, they return to their command and must continue to perform their duties. In the latter setting it is the commanding officer, and not the psychiatrist who makes the ultimate decision concerning the man's requests. These are not decisions involving psychotherapy or hospitalization; such determinations might involve the following considerations: Should the man's request for a change in job be honored? Should the man's desire for discharge from the service be granted? Does the man's home situation justify humanitarian reassignment? The psychiatrist is often asked for his recommendation. This opinion is expected to constitute an independent judgment, and the psychiatrist cannot be reprimanded for offering an opinion contrary to the

customary attitude of the command.¹⁸ The command is also free to disagree, however, and has the authority to make the ultimate decision. In arriving at his ultimate decision, the commanding officer takes into consideration the psychiatrist's opinion, the man's prior service record, reports of the man's supervisors, the individual's desires, and the effect which this decision will have on the command and the military mission. Primary importance may be attributed to any one of these factors by an individual commanding officer, depending on his values and upon the circumstances. For example, at the height of the Vietnam conflict a commanding officer might well have been less inclined to administratively separate a man, than at a time when the number of men on active duty is being reduced.

Accordingly the military psychiatrist may evaluate a man, establish a psychiatric opinion, and make a recommendation. Admittedly the recommendation may be rejected by the man's command, but such an eventuality is hardly unique to the military experience. Any psychiatrist employed by an organization or institution may have an analogous experience. For example, an executive in industry may refuse to accept a psychiatrist's recommendations concerning the management of his employee. If the psychiatrist treads beyond the issue of psychiatric illness and treatment, and by his recommendations or other comments betrays an inner conviction that he possesses greater competence to manage the industry and its employees than the executives, then he should not be surprised if the management should become hostile. The patient's boss may become angry with the psychiatrist who exceeds his recognized area of expertise in psychiatric evaluation and treatment. In the military the experience of attempting to predict future performance in WWII on the basis of psychiatric interview should make psychiatrists cautious in their criticisms. Plag and Arthur even purposely returned men, who had been designated unsuitable by psychiatric evaluation, for a trial of duty. Seventy percent of these men were still on active duty two years later, and most had adapted satisfactorily.¹⁹ In fact, in subsequent studies Plag and Goffman demonstrated that factors such as level of schooling, arithmetic test score, mechanical test score, the number of expulsions from school, and family stability were better predictors of future successful service than psychiatric-screening interviews. The psychiatric-screening interview significantly related to later effectiveness, but was far from being as valid a predictor as a combination of the above factors.²⁰

Further, Sullivan, in an admittedly small study (eight fully trained psychiatrists) of psychiatric judgments

demonstrated that personal values have an influence on the recommendations which psychiatrists make.²¹ He asked these psychiatrists to rate the following six values:

- (1) It is of great therapeutic importance to prevent patient failure in the important life task of successfully completing one's service commitment.
- (2) Despite the attendant difficulties, our country has taken the most honorable and practical course available in becoming deeply involved with the Vietnamese people and their conflict.
- (3) Almost anyone accepted into the military service can complete his time successfully if he is actually willing to try.
- (4) The regulations entailed in military life in our armed forces are reasonable, and should not be onerous to fulfill, especially for a doctor.
- (5) A person who voluntarily agrees to extend military service should honor his commitment if at all possible. Unhappiness with the service, and attendant minor symptoms of emotional distress do not constitute adequate reasons to free a man from the military obligation unless a disabling emotional illness should supervene.
- (6) I have a strong sense of personal obligation to serve my country on a tour of duty in our armed forces at this time of conflict.

The study disclosed that the four doctors who rated these values highest found a combined total of 28% of their patients fit for duty, whereas the four doctors with the lowest scores found only 18% of their patients fit for duty. This sampling was taken from an inpatient population. It would be interesting to perform this same experiment with a larger sample of psychiatrists, and particularly with an outpatient population where the patients may have less serious psychiatric illness, or none at all. In the case of patients who do not require hospitalization, perhaps the psychiatrist's assessment and his recommendations should constitute only one of the many aspects to be considered by the commanding officer. When a psychiatrist makes a recommendation concerning a patient who does not require hospitalization, the evaluating psychiatrist's values seem to form an inseparable component of his assessment and recommendations. If he views the military organization as a noxious agent, then he must attempt to protect his patient from it. This mental set is likely to influence his assessment, and almost certainly would

affect his recommendations. If on the other hand he views the military organization as a potentially maturing, usually healthy influence on the young person serving on active duty, he may not feel the need to protect the patient (not requiring hospitalization) from the command. He may be more inclined to trust the command to make an appropriate decision. He may be quite content to have his findings and recommendations considered by the command as only one aspect of a complex situation.

I do not mean to imply by my remarks that commands and commanders do not have their problems. Sometimes leadership is deficient. Sometimes command policies are productive of psychiatric symptoms. This is a topic in itself, and could be the subject of another essay. There are several interrelated points which we might briefly address in this discussion, however. An individual patient's consultation is not the best vehicle for changing pathological command policies or procedures. The individual's psychiatric illness may get lost in the large issue of the relationship between the psychiatrist and the command, and that relationship is likely to become a hostile counterproductive one. The technique of command consultation is a far better approach to correcting pathology within the command. The model for this approach is taken from industrial psychiatry. Levinson²² describes the technique of psychiatric consultation in industry. Bey²³ relied on these concepts in developing command consultation in Vietnam. This technique can work very well, but for various reasons that are well described in the previously cited two references, the psychiatrist and those in positions of leadership must be involved. If the psychiatrist who attempts command consultation has an axe to grind for his patient, his effectiveness, both with his patient and with the command may be jeopardized.

SUMMARY

The intent of this discussion is to clarify the dual role of the military psychiatrist as an officer and a psychiatrist, and to challenge the hypothesis that military psychiatry is so different from general psychiatry, as to render it essentially useless as a source of general psychiatric knowledge and experience. This dual role is neither new nor unique. It is a problem faced by all psychiatrists employed by an organization. In the military, it was equally as true in the 1940s and 1950s, a time when military psychiatry was credited with developing many of the treatment approaches of modern psychiatry.

Indeed, if there has been a change in military psychiatry in recent years, it would appear to relate to an

increasing sophistication of military leaders in psychological and social matters. No small example of this is the evolution of treatment and rehabilitation approaches to drug and alcohol abuse. Paradoxically, it is at this time that military psychiatry is being challenged in such a fundamental way. It would appear that at least part of the explanation lies in the area of attitudes and values, particularly those relating to military involvement in the Vietnam conflict. I do not mean to imply that there are no problems in the practice of psychiatry in the military. But the issue being raised by some is much more fundamental: is military psychiatry really psychiatry, or is it something so different that it has no relevance to the profession of psychiatry in general?

In my opinion it is still possible to be a psychiatrist and a military officer, and in that role as a military psychiatrist, to practice psychiatry compatible with the best standards of modern psychiatry. I further contend that military psychiatry will continue as a source of relevant clinical and research experience, especially for other psychiatrists employed by organized groups.

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MEDICAL EVACUATION

A nighttime medical evacuation from the Greek island, Thira was performed recently by an SH-3 helicopter crew from the aircraft carrier USS *Independence* (CVA-62).

The chopper landed in a field marked by a large bonfire, and picked up a woman suffering from internal hemorrhage. She was accompanied by her husband, the commander of the Greek radar site on the island.

The patient was flown to a U.S. Air Force base in Athens, where a waiting U.S. ambulance and Greek doctor rushed her to a civilian hospital.—NAVNEWS, Washington, D.C.

CANNONS FOR PEACE



CHOLERA IN SOUTHERN ITALY

By PH2 E. Hawkins, USN,*
U.S. Naval Support Activity,
FPO New York, New York 09521.

One of the long-range benefits to result from the recent cholera outbreak in southern Italy during the early fall of 1973, was a new spirit of cooperation between American and Italian medical authorities.

Early in the cholera outbreak that eventually claimed at least 16 lives in the Naples area, American medical personnel from the U.S. Naval Hospital and Environmental Preventive Medicine Unit Seven (EPMU-7) assisted in the mass cholera-immunization programs implemented throughout the city. By the end of the first inoculation period, Americans had helped to deliver more than 200,000 injections in less than one week.

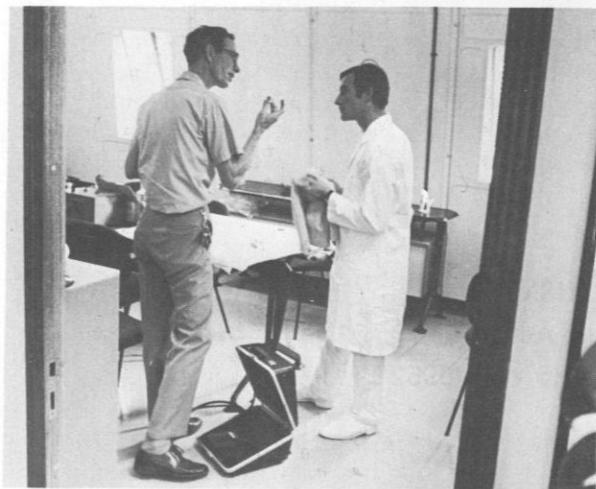
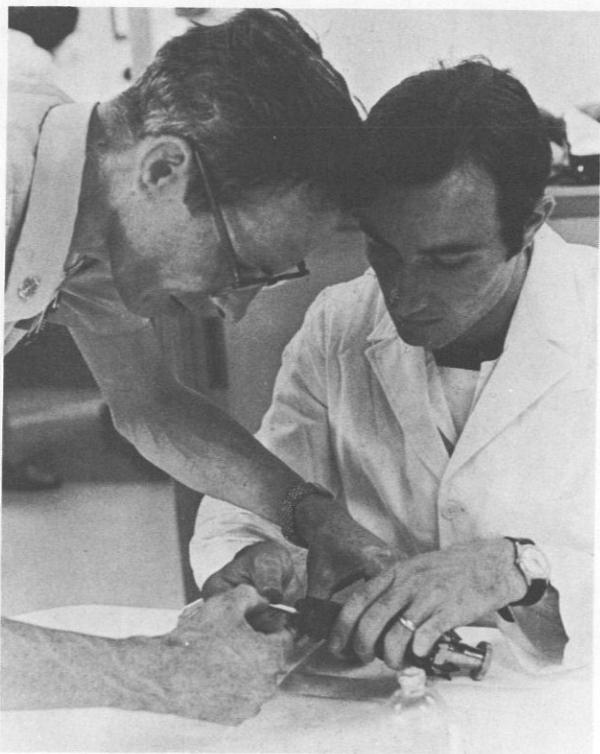
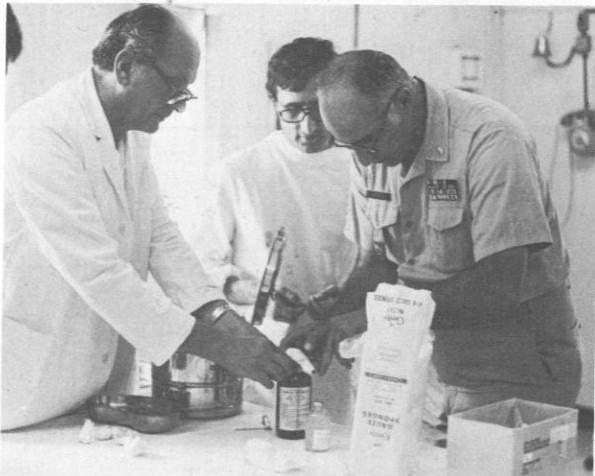
The mass-immunization guns used by the Navy Medical Department were of great interest to the Neapolitans. Capable of administering 2000 doses in an hour, the guns are considerably faster and less painful than the traditional hypodermic syringes used by most Italian

medical authorities. In the Italian political magazine *Il Borghese*, these guns were dubbed "cannons of peace."

Impressed by the practicality and popularity of the shot-guns, Italian health officials purchased several of them from an American supply house. CAPT Walter F. Miner, MC, USN, the Officer-in-Charge of EPMU-7, had been working closely with Italian medical authorities throughout the immunization periods, and offered the assistance of EPMU-7, to provide training in the use and maintenance of the guns. The offer was received with enthusiasm, and shortly thereafter, training sessions commenced at the EPMU-7 offices in the Naval Support Activity Naples.

The first training session was conducted on 12 Sep 1973, with two doctor and three technician attendees. Subsequently, another nine medics from the Italian Police Department, and eight Italian Navy physicians and technicians received training. Eight hours of didactic lectures on the use and maintenance of the jet-injection apparatus were provided, prior to practical instruction.

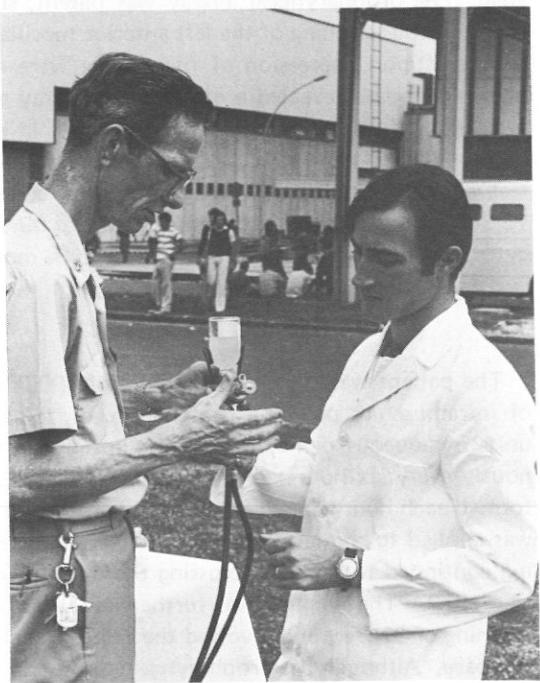
*The splendid photographs appearing in the above article, and adorning the front and back covers of this issue, were taken by PH2 G.T. Leidy, USN and PH2 E. Hawkins, USN, Atlantic Fleet Combat Camera Group Naples Detachment. We are grateful for their excellent coverage.



On-the-job training was accomplished on 14 Sep, when EPMU-7 personnel provided technical supervision for their Italian colleagues who inoculated workers at Alfa Sud, the southern Italy Alfa Romeo plant, located near Naples. Before the day was over, 8,800 of the 12,000 factory employees had received their second injection in the two-shot cholera immunization series. CAPT Miner remarked that "By the end of the day, the Italian medics were working side-by-side with our men. They were really good."

Chief Hospital Corpsman Robert A. Hickman, who played a prominent role in the training cycle because of his impressive experience in use and maintenance of the gun, commented that the essential part of the training is experience and actual use. "The Italian medical personnel progressed rapidly because of their experience gained at the Alfa Sud factory. You have to know it all — inoculations and maintenance — to become proficient with the apparatus. The Italian medics have a good beginning and a lot of potential."

CAPT Miner expressed delight with the success of mutual cooperation between the American and Italian medical personnel. The program strengthened the concept that from adversity, people often find professional empathy and respect that transcend physical boundaries. It's one of the most satisfying rewards of a career in health-care services, for everyone benefits.



LUDWIG'S ANGINA:

Report of a Case

By CAPT Elgene G. Mainous, DC, USN,*

and

LCDR Gary L. Smith, DC, USN,**

Naval Hospital Long Beach, California 90801.

Ludwig's angina probably represents a rare complication of tooth extraction. A review of the recent literature reveals few reported cases.¹ In the last few years, most reported cases of Ludwig's angina have occurred in situations unrelated to dental extractions.²⁻⁴ However, an extensive review of the literature in the early 1940s reveals that Ludwig's angina evolved most frequently from post-extraction infection involving mandibular-posterior teeth.⁵⁻⁷ The age of antibiotic therapy has resulted in a decreased incidence of Ludwig's angina, as well as an altered philosophy of treatment. Emphasis is now placed on antimicrobial therapy and maintenance of a patent airway, rather than early surgical incision and drainage. Most dentists are aware of the possibility that this rapidly spreading cellulitis may follow dental extractions, but despite aggressive antibiotic therapy, rapid spread of infection can be life threatening.

REPORT OF A CASE

A 21-year-old male had erupted maxillary and mandibular third-molar teeth extracted by forceps delivery on 26 Dec 1972. Forty-eight hours following his extractions, he became febrile and complained of pain in the left mandibular extraction site. He was referred to Long Beach Naval Hospital on 29 Dec 1972, where

The opinions or assertions contained in the above article are those of the authors, and are not to be construed as official or reflecting the views of the Navy Department, or the naval service at large.

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he was admitted with a diagnosis of left submandibular cellulitis.

Past medical history revealed recent dental extractions, and analgesics for pain were the only medications used. Review of systems was within normal limits.

Physical examination revealed a well developed, well nourished, 21-year-old male in moderate distress because of an indurated left submandibular swelling, trismus, and dysphagia. Oral temperature was 100.6°F. Intra-oral examination revealed recent extraction sites located in the left maxillary and mandibular third-molar area. The oropharyngeal airway was patent; slight erythematous swelling of the left anterior tonsillar pillar, and pain upon depression of the tongue were noted. Laboratory data revealed a normal chest X-ray examination on admission, and urinalysis was within normal limits. VDRL (Veneral Disease Research Laboratories) test was nonreactive. The white blood cell count was 13,700/cu. mm., with a differential count of 89% polymorphonuclear leukocytes, 1% stab cells, 6% lymphocytes, and 4% monocytes.

COURSE OF TREATMENT

The patient was started on a course of 600,000 units of intramuscular procaine penicillin b.i.d.; 2,000,000 units of aqueous penicillin were administered intravenously every six hours; Oral saline irrigation was performed each hour while awake, and external moist heat was applied to the left submandibular area. The swelling continued to increase, crossing the mid line on 30 Dec 1972. The swelling was further increased on the morning of 31 Dec, and involved the right submandibular space. Although the oropharyngeal airway appeared

adequate on intra-oral examination, the tongue was elevated. The aqueous-penicillin dose was increased to four million units every four hours, and 0.5 gm. of intramuscular streptomycin b.i.d. was added to the antibiotic regimen. By noon of that same day, the patient began to experience respiratory difficulty and no oropharyngeal airway could be visualized; crowing sounds on inspiration were noted. A soft tissue X-ray study of the lateral neck revealed the posterior position of the tongue, against the posterior wall of the oropharynx (Figure 1). The patient

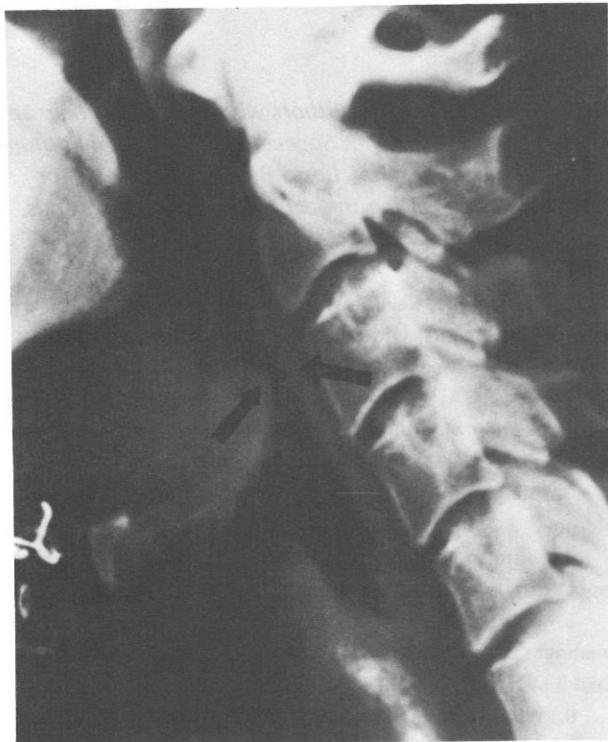


Figure 1.—Soft-tissue radiograph, a lateral-neck view, demonstrates the occluded oropharynx.

was taken immediately to the main operating room where a tracheostomy was performed under local anesthesia. The patient's respiratory distress was relieved immediately following the tracheostomy, but the elevation of the tongue made it impossible to swallow (Figure 2).

On 1 Jan 1973, spontaneous intra-oral drainage appeared in the left floor of the mouth, adjacent to the left mandibular extraction site. Culture and sensitivity studies performed on the exudate revealed coagulase-negative *Staphylococcus epidermidis*. The following day the patient presented decreased elevation of his tongue, and the submandibular swelling began to resolve. Intravenous therapy was discontinued on 5 Jan 1973, and the tracheotomy tube was removed on 6 Jan. The

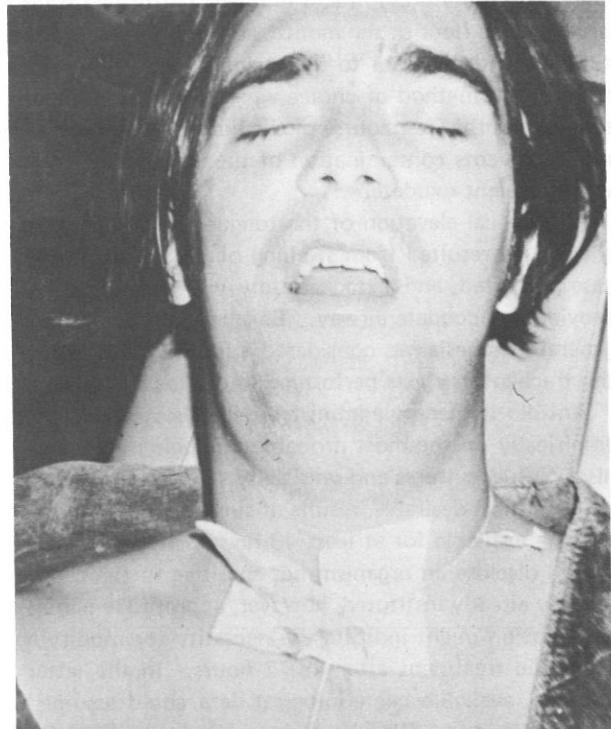


Figure 2.—Facial appearance following tracheotomy. Note elevated position of tongue, and pronounced swelling of the submandibular area bilaterally.

patient subsequently progressed in a satisfactory manner; after the swelling had completely resolved and the tracheostomy site had healed satisfactorily, he was discharged to home on 12 Jan 1973.

DISCUSSION

Ludwig's angina is described as a rapidly spreading, gangrenous, cellulitis or phlegmon of the submandibular region involving three facial spaces bilaterally: the submandibular, sublingual, and submental spaces.⁸ The indurated swelling in these spaces is seldom productive of abscess formation early in the disease, therefore incision and drainage rarely produces more than serous exudate. Although it is recognized that the time-honored treatment of Ludwig's angina is extra-oral surgical incision and drainage, the procedure followed in this case was to reestablish an airway, treat rigorously with antibiotics, and wait for evidence of localized abscess formation. Surgical incision and drainage were not performed in this case.

Early extra-oral surgical intervention in the submandibular area may even complicate an already serious condition by introducing a more virulent microorganism, thereby increasing inflammation in the involved swollen

area. Intra-oral incision and drainage performed trans-orally in the floor of the mouth, adjacent to the extraction site and posterior to the mylohyoid muscle may be the surgical method of choice when fluctuation is present during the later course of the illness. The latter technique prevents contamination of the tracheotomy site with purulent exudate.

Mechanical elevation of the tongue and the floor of the mouth resulted from swelling of the tissues in the case presented, and a tracheotomy was performed to provide an adequate airway. Because intubation for general anesthesia was considered extremely dangerous, the tracheotomy was performed under local anesthesia.

Antibiotic therapy administered in this case was based empirically on the most probable etiologic microorganism. While cultures and sensitivity studies of the exudate are most desirable, results of such studies would not become available for at least 48 hours. If the results should disclose an organism not sensitive to the chemotherapy already instituted, however, appropriate clinical reevaluation might indicate the necessity for modifying antibiotic treatment after 48-72 hours. In the latter instance, available bacteriological data could assume great significance. Blood cultures, and needle aspiration of fluid from the area of cellulitis may prove useful in obtaining bacteriological specimens.

Since gram-positive bacteria are the most frequently encountered microorganisms in dental infection, the patient was started on intramuscular and intravenous penicillin therapy. When no apparent clinical response was observed in 48 hours, streptomycin was added to the antibiotic regimen, and the penicillin dosage was increased. Cultures and sensitivity studies of the purulent exudate were conducted daily; coagulase-negative, *Staphylococcus epidermidis* was the only organism identified.

Spontaneous intra-oral drainage in the left floor of the mouth, adjacent to the extraction site, coincided in time with improvement observed in the patient's

condition. At no time during the course of the disease did a fluctuant area develop in the submandibular region, to permit extra-oral drainage.

SUMMARY

A case of Ludwig's angina that presented following simple-tooth removal is reported. In the management of this patient, emphasis was placed upon antibiotic therapy for control of infection and the maintenance of an adequate airway, rather than on surgical incision and drainage.

Acknowledgment: The authors wish to express their appreciation to HM2 James Spencer, USN, Medical Photographer, Naval Hospital Long Beach, California, for assistance in providing the accompanying illustrations.

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HOW TO COMPUTE TAKE-HOME PAY

What mathematical formulas do the clerks and computers use to determine that final figure typed on your pay check?

To calculate military pay, each month, including February, is considered to have 30 days, and a pay year is based on 360 days.

Simply stated, regular monthly pay and all extra allowances are added together, then deductions for taxes, allotments, etc., are subtracted. The resulting figure is first divided by 30 (days) and multiplied by the exact number of days in a pay period (but ignoring the 31st day when it occurs). This produces the final military take-home pay.—NAV-NEWS, Washington, D.C. 

Characteristics Associated with

Personality Disorders in an Outpatient Clinic

**By CDR Robert F. Carey, MC, USN,
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Naval Station, Norfolk, Virginia 23511.**

The individual diagnosed as having a personality disorder demonstrates, without evidence of neurosis or psychosis, a chronic group of behavior patterns which severely limit, or at times totally preclude the ability to function well in society. The personality disorder is generally correlated with inadequate job adjustment. Such an individual does not get along with his peers or superiors. He often fails to carry out assignments, or even to show up for work. At other times he appears to be doing as well as those around him. To a large degree, it has been difficult to predict outcomes for these individuals, but they are generally considered to be poor risks for continued military duty.⁴ Of those who are returned to duty, poor motivation for military service appears to be a significant factor in ultimate failure. Edwards, et al.,³ found that only 11% of poorly motivated individuals could be classified as having successfully returned to duty, failure being equated with premature separation from service for psychiatric disorder, or ineffective performance on duty. This correlates notably well with the findings of Berry, et al.,¹ who also reported an 11% success rate.

The present study illustrates the high uniformity of certain demographic characteristics considered to be possibly significant, in individuals diagnosed as

personality disorders. A subsequent study is being conducted, with the objective of comparing this personality-disorder group with a group of outpatients who were not diagnosed as personality disorders.

METHOD

The subjects studied were 200 Navy and Marine enlisted patients from the outpatient psychiatric service at a major Naval dispensary. Only 3% were Marines. All were diagnosed as character and behavior (personality) disorders. A random sampling was obtained by selecting the subjects, in alphabetical order, from the calendar-year-1972 files of the clinic. The year 1972 was selected because the professional staff was completely changed in midyear, thereby reducing the chance of biased selection. Subjects were divided into two samples, which differed with respect to the final recommendation: "return to duty," or "administrative discharge." The objective was to discover if personality-disorder subjects were young, low-ranking troublemakers as one would expect from experience, and if certain demographic characteristics were significantly associated with the recommendations for administrative discharge or retention.

Prior to being seen by a psychiatrist, all patients completed a NAVREGMEDCENBRDSPNAVSTANORVA Form 6520/1 (Revised 5/72) Active-Duty Questionnaire.

*Naval Regional Medical Center

The opinions and assertions in the above article are those of the author, and are not to be construed as reflecting the views of the Navy Department or the naval service at large.

RESULTS

Table 1 summarizes the demographic information for the entire group. RTD = return to duty, that is, no recommendation was made for administrative discharge now or later. AD = recommended for administrative discharge.

TABLE 1

CHARACTERISTICS OF OUTPATIENT PERSONALITY DISORDERS

	<i>Number</i>	<i>Percentage</i>
Age		
17-24	193	96.5
25-	7	3.5
Race		
Caucasian	160	80
Negro	33	16.5
Other	7	3.5
Sex		
Male	199	99.5
Female	1	.5
Rank		
E1-E4	195	97.5
E5-	5	2.5
Active Time		
0-4	192	96
4-	8	4
Branch		
Navy	194	97
Marine Corps	6	3
Behavior Problem		
Yes	160	80
No	40	20
Punishment		
Yes	160	80
No	40	20
Recommended for AD (Administrative Discharge)		
Yes	163	81.5
No	37	18.5

Table 2 provides a comparison between RTD and AD recommendations in the three areas where a significant difference might exist: race, behavior, and punishment.

Examination of the above tables reveals that, as expected, personality disorders are comprised of young, male, first enlistments in the grades E1 to E4, who had been behavior problems of sufficient significance to incur military punishment. An examination of the 80% who presented behavior problems reveals that 83% of them were recommended for administrative discharge. Only 70% of those without behavior problems were recommended for administrative discharge. Inversely, 30% of the non-behavior problems, versus 17% of the behavior problems were returned to duty — almost two to one. Although this may be statistically significant, it does not appear to be significant in actual practice.

DISCUSSION AND CONCLUSIONS

Several ideas become apparent from consideration of this material, especially when it is combined with earlier findings reported by the Navy Medical Neuro-psychiatric Research Unit as previously noted.¹ The expected characteristics are significantly prominent to render the personality disorder easily identifiable by the respective diagnostic descriptions, especially when no obvious psychosis or neurosis exists.² The presence of behavior problems does not lead automatically to a recommendation for administrative discharge; although 83% with behavior problems did receive a recommendation for AD, some individuals were perceived by the examiner as capable of returning to duty.³ Of 160 whites, 20% were returned to duty, whereas of 33 blacks, only 12% were returned to duty. It would appear that the black who is pushing to "get out" makes his wish more emphatic, and is viewed by the examiner as having a greater potential for achieving that goal.

Clum and Hoiberg² note that "subjects diagnosed as personality-pattern disturbances were found to have lower likelihood for effectiveness than other diagnostic groups." Wilkins⁵ notes that in a typical pre-Vietnam calendar year, "... personality disorder, accounted . . . for over 200,000 of the sick days, ranked behind only automobile accidents as a cause of time lost from work . . . character and behavior disorders accounted for 25.5% of the invaliding." Gunderson⁴ notes that personality disorders are considered poor risks for continued military service. Berry, et al.,¹ note that character and behavior disorders have only an 11% success chance if returned to duty. All this seems to indicate that personality-disorder types are extremely expensive

TABLE 2
VARIABLES IN PERSONALITY DISORDERS RETURNED TO DUTY

OF 37 RTDs (Return-to-duty Recommendations)

	No/%	No/%
Race	Caucasian 33/89%	Negro 4/11%
Behav Prob/Punish	25/67%	12/33%
No Punishment	25/67%	12/33%
	<i>RTD</i>	<i>AD</i>
Not Behav Prob	30% (12 of 40)	70% (25 of 40)
Behav Prob	17% (25 of 160)	83% (135 of 160)
of 33 Black	12% RTD (4 of 33)	88% AD (29 of 33)
of 160 White	20% RTD (33 of 160)	80% AD (127 of 160)

in terms of time and effort to retain on active duty, and will, ultimately produce a very poor return for that effort, even with special attention.

It has been noted previously that there was some difference observed between retention of those who were behavior problems, and those who were not, but the difference would not be significant on a practical basis. The findings of this study, and that of Berry, et al.,¹ substantiate this viewpoint. Only 18.5% of the personality disorders in this study, and only 24% of those in the study conducted by Berry, et al., were recommended for return to duty. Since it is considered that only 11% of those recommended for return to duty have any chance for success, only 2-2.6% of those seen can actually be expected to perform their military duties satisfactorily. Considering the enormous amount of time, energy, and expense which these individuals usurp, it naturally follows that much could be saved by the simple expedient of direct processing for administrative discharge when such persons are first identified.

Senior-line officers have sufficient practical experience to recognize these men, and have done so for many years. At times, through personal efforts, a senior-line officer has been able to salvage a troublemaker. As the potential for success at this is only about one in 45, however, the cost in terms of effort spent on those that are not salvaged is extremely high. It is this author's opinion that the results do not justify the cost.

With the use of standard diagnostic criteria, plus experience, the general medical officer will in most cases be able to recognize the personality disorder. By and

large, the general medical officer is capable of ruling out chronic neurosis or psychotic conditions. The behavior patterns noted above, especially when combined with preenlistment behavior problems in school, and with the law, make the diagnosis generally apparent.

SUMMARY

Personality disorders can be identified by a constellation of behavior patterns which are well known to experienced Navy officers. Very low success rates, in returning personality disorders to duty, lead to the conclusion that it is both humane and expedient to discharge such individuals administratively, as soon as they can be identified.

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THE AIRCRAFT.—A CH-46 helicopter used for patient transfer.

Patient Transfer by Helicopter

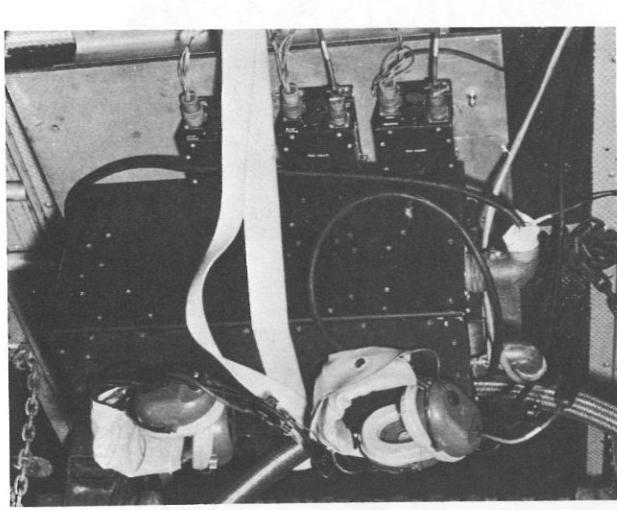
in Peacetime Environments

By CAPT John William Johnson, MC, USN,
Director, Fleet and Marine Corps Medical Support Division,
Bureau of Medicine and Surgery (Code 49), Washington, D.C.

Combat experience in Korea and Vietnam clearly identified the helicopter as an outstanding casualty-transfer vehicle. The helicopter significantly reduced the time interval between injury and definitive treatment, and thereby contributed to a progressive decline in casualty morbidity and mortality rates. The helicopter helped resolve some previously very difficult problems of casualty evaluation by providing: ready

access to active combat areas, rapid transit to specific care facilities, and marked flexibility in evacuation routes. In Vietnam the helicopter achieved a reputation similar to that acquired by the jeep in World War II, and it naturally followed that serious consideration be given to identifying civilian and peacetime roles for the helicopter. As with the jeep, some ongoing civilian uses were identified; but, it became quickly apparent that significant differences between the combat and peacetime environments would prevent the extended utilization of helicopter-medical evacuation, developed under combat conditions, in the civilian environment.

The opinions or assertions contained in the above article are those of the author, and are not to be construed as official or representing the views of the Navy Department or the naval service at large.



HELICOPTER EQUIPMENT.—Frequency converter and intercommunication system.



ON THE LOADING DOCK.—Medical equipment and gear is assembled for loading. (Patient transfer life-support equipment used at Camp Lejeune)



PLACED IN AIRCRAFT.—Medical gear is identified by number as follows: 1 = Box 1, containing small instruments, tubing, masks, catheters, syringes, litter straps, etc.; 2 = Box 2, containing drugs, needles, tape, bandages, angiocaths, etc.; 3 = Box 3, containing respirator, oxygen regulator, intravenous solutions, etc.; 4 = CH-46 litter stanchions and straps; 5 = Oxygen cylinder; 6 = Portable electric suction; 7 = Portable gasoline-powered generator; 8 = Frequency converter and intercommunication equipment; 9 = Heart monitor/defibrillator; 10 = Intravenous bottle suspension.



ISOLETTE.—Within the CH-46 aircraft, a transport isolette is seen in place, in front of oxygen cylinder on the right side.

COMBAT vs. PEACETIME USE

It should be remembered that the helicopter functioned in the combat environment only as a rapid and mechanized stretcher. It simply picked up and moved casualties. No especially trained medical personnel or sophisticated medical equipment were on board to provide, or monitor medical care en route. No capability or concept similar to the surface ambulance was developed for the helicopter during its Vietnam tour of duty. Brevity and ease of transfer permitted this unsophisticated utilization of the helicopter, but the absence of in-transit medical care became pertinent and significant when peacetime and civilian uses were envisioned. The combat use of the helicopter presented other characteristic features, in that the patient-selection options were minimal, and the differential between the levels of on-site casualty care and echelons of treatment available within the time frame of the helicopter justified the movement of as many casualties as possible. If these combat-utilization caveats are fully considered, the range of similar civilian uses becomes restricted.

An excellent proposal regarding patient transfer by helicopter was submitted by the U.S. Naval Hospital, Camp Lejeune, N.C., in 1971.¹ This proposal primarily

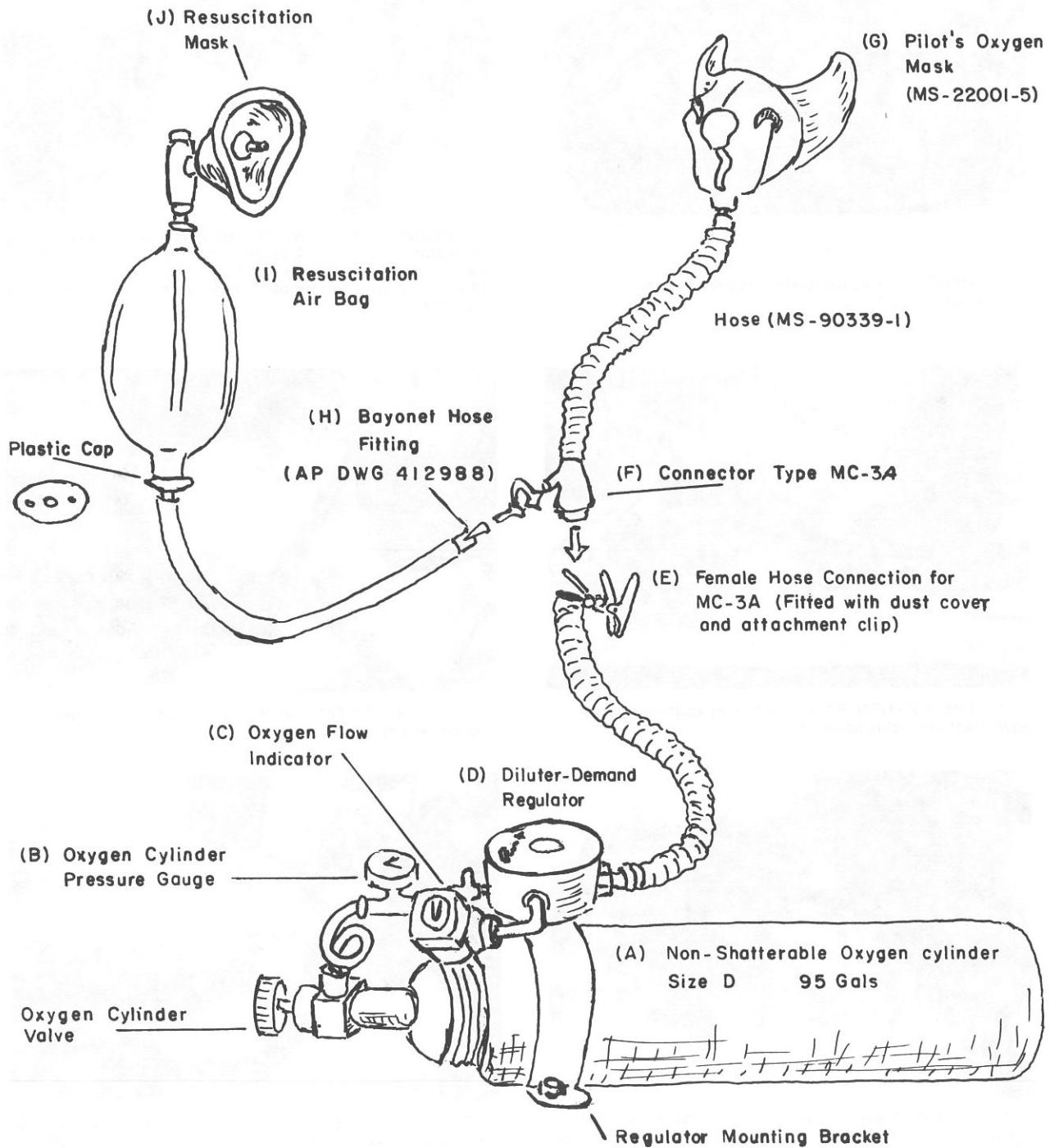
addressed the transfer of patients from remote areas, but also included hospital-patient transfer to facilities having more sophisticated care with specialized capabilities. The proposal incorporated the provision of en-route care via on-board medical personnel and electronic-monitoring equipment. The proposal was basically structuring the helicopter as an ambulance, and utilizing its reduced in-transit time to afford the transfer of seriously ill patients. (The first five photographs illustrate the system as locally developed on site.) Although limited use of this system was effective, the proposal introduced some difficult problems when Navy-wide, potential use was considered.² Briefly these involved:

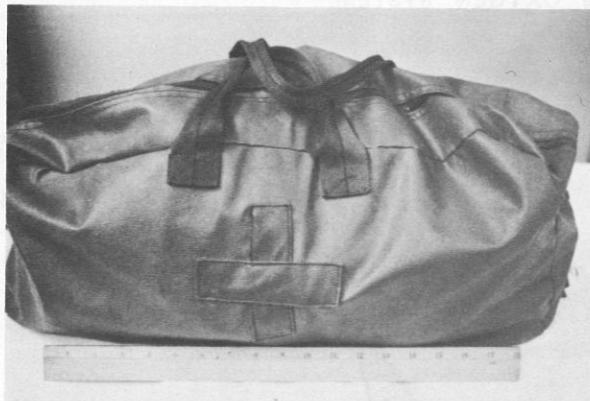
1. Reliability of medical equipment in the helicopter environment.
2. Adaptation and conversion of standard medical equipment to the helicopter platform.
3. Potential conflict of on-board electronic equipment.

NAVAL SURVEY

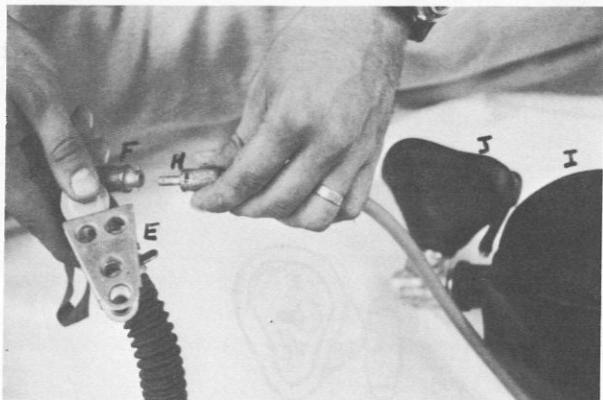
Regarding these conditions, preliminary research indicated that an extensive and long-term development program would have to be conducted to appropriately

MEDICAL EVACUATION OXYGEN SYSTEM





COMPACTLY PACKED.—Medical-evacuation oxygen equipment carrying bag.



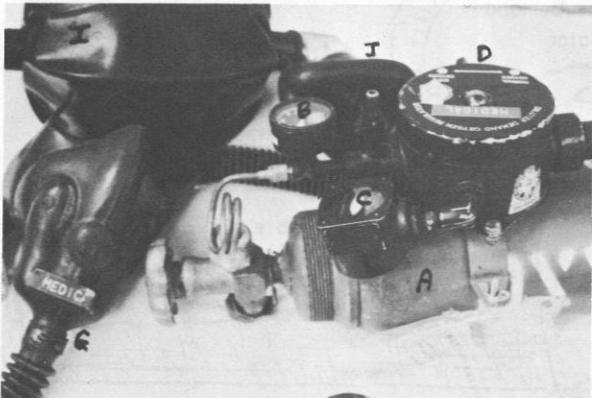
CONNECTIONS.—Identified by letter are: E, Female hose connector; F, the MC-3A connector; H, Bayonet hose connection for the resuscitation bag. The MC-3A connector is already attached, by the female hose connector, to the diluter-demand regulator.



IN THE OXYGEN BAG.—Medical-evacuation oxygen equipment and some accessories.



DEMAND SYSTEM.—Using the Pilot's oxygen mask (G), the demand system is being applied.



MAJOR COMPONENTS OF THE OXYGEN SYSTEM.—Identified by letter, these are: A, Oxygen cylinder; B, Oxygen cylinder pressure gauge; C, Oxygen-flow indicator; D, Diluter-demand regulator; G, Pilot's oxygen mask; I, Resuscitation bag; J, Resuscitation mask.



FORCED OXYGEN.—Resuscitation bag and mask provide forced oxygen ventilation. The Pilot's Mask (right foreground) is still attached, via the MC-3A Connector (F), to the female hose connector (E). The hose fitting (H) is connected to the MC-3A connector (F).

resolve the possible conflicts. Prior to initiating such a level of endeavor, it was elected to conduct a survey of the Navy medical regions concerning the need for patient transfer by helicopter.

The survey was initiated in April 1973, and terminated in August 1973. The survey requested comments about the specific requirements or basic needs for patient transfer by helicopter; the type of patient that should be nominated for such transfer, as well as the type and amount of monitoring and treatment equipment required on board; and additional factors that should be considered.

General Consensus.

Survey reports from responding Navy medical regions were compiled and assimilated for response commonalties, with all additional factors being identified. The following consensus emanated from the survey:

1. Patient transfer by helicopter is indicated only for emergencies in remote areas, or in mass-casualty circumstances.

2. The helicopter is less desirable than the surface ambulance for most patient transfers.

3. The helicopter environment is not conducive to sophisticated medical monitoring and/or care.

Suggestions as to patient selection and on-board equipment encompassed marked ranges of variation, and were more reflective of parochial needs than Navy-wide usage.

Individual reports contained several specific observations and proposals that were considered worthy of preservation for any future combat or peacetime uses, but were not applicable to the direct thrust of this survey. (The last six photos illustrate a medical-evacuation oxygen-resuscitation system.)³

Added Expense.

Additional factors that create significant costs were also identified:

1. Construction of helo pads at care facilities.
2. Acquisition and operation of communication and navigational equipment.
3. Need for additional personnel with specialized training.
4. Negotiations for helo availability.

SUMMARY

The survey clearly indicated that despite its excellent application in initial, combat-casualty evacuation, the helicopter has serious limitations as an ambulance in the peacetime environment. The commonalties emanating from the survey should serve as current guidelines in the selection of the helicopter for patient transfer. The helicopter does have merit within the operational capabilities and medical-care limitations defined, and its use within those parameters should not be discouraged.

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MARINE MAMMAL BOOK

A non-technical account of the relationship between marine mammals and man has been authored by a Navy research scientist.

Written by Forrest G. Wood, *Marine Mammals and Man* clarifies the Navy's work with marine mammals, and dispels many of the rumors based on misinformation or misinterpretation of the facts. Wood was curator and director of exhibits at Marineland of Florida from 1951 to 1963. In 1963, he was placed in charge of the Navy's Marine Bioscience Facility at Point Mugu. Presently, Wood occupies the Naval Material Command Marine Bioscience Program Office in the Biosystems Research Department at the Naval Undersea Center, San Diego, Calif.

The book opens with a discussion of how the porpoise has acquired its "public image." Wood then goes on to describe the techniques for capture, conveyance and care of cetaceans. Also included are porpoise hearing, inter-porpoise communication, deep-diving experiments, and the use of marine mammals in Navy recovery operations.—NAV-NEWS, Washington, D.C. 

ADVANCED DENTAL EDUCATION PROGRAMS

The Dental Training Committee has selected 61 dental officers to commence full-time postgraduate training next year. In addition, they have selected 32 General Practice Residents in dentistry at seven naval hospitals. Among those selected were 15 dental officers for post-doctoral fellowships in various dental specialties. The candidates must either be members of the Regular Navy, or have requested augmentation; in addition, candidates must have completed a tour of duty overseas, or at sea for rotational purposes.

The Dental Corps enjoys a high percentage retention rate.

BROMINATION OF SHIPBOARD WATER

Shipboard trial of a system that uses elemental bromine loaded onto an ion-exchange-resin cartridge has indicated that, with certain limitations, bromine is an effective alternative to chlorine for the disinfection of potable water supplies.

Future plans call for installation of the bromine system on the DD-963 class, PGs and PFs (Patrol Vessels) . . . some existing ships may be scheduled for retrofit of this system.

REORGANIZATION OF REGIONAL MEDICAL CENTERS

The following decisions have been reached:

(1) The remaining core hospitals located at all Naval Regional Medical Centers (NRMCs) will be recommended to CNO for disestablishment as an activity, to provide for consolidation of the medical center and hospital organizations, and revision of the NRMC mission to deliver health care.

(2) Training or Research BUMED command activities, now located at NRMCs as echelon-4 or -5 activities under NRMC command, will be recommended to CNO for change to echelon-3 activities under the command and support of BUMED.

(3) The effective date planned for reorganization and consolidation of NRMCs and hospitals is 1 Jan 1974.

(4) Patient affairs and Food Management Services will be organized under the Director of Professional Services at the NNMC Bethesda on an experimental basis; at all other NRMCs, Patient Affairs and Food Management Services will be organized under the Director of Administrative Services.

(5) Target date for revision of BUMEDINST 5450.4B, the standard organization guide for NRMCs and hospitals, is Jan 1974.

INDUSTRIAL HYGIENIST IN OPNAV

A new position is being filled by an industrial hygienist who will be "Special Assistant for Occupational Health Programs," BUMED Code 73B, and who will

be assigned as a full-time Medical Dept. Representative within the office of CNO as the Assistant for Environmental Safety and Health Program Coordinator (OP-09F6C/OP-45G).

EXECUTIVE ORDER 11738

This Order effects all Federal contracts, grants or loans, and requires that the standards of the Clean Air Act and the Water Pollution Control Act be met.

INTERNATIONAL SHIPYARD HEALTH CONFERENCE

This conference will be held in Los Angeles, 13-15 Dec 1973. RADM Geib, MC, USN (BUMED Code 7) will be Chairman of the Keynote Session, and CAPT Lawton, MC, USN (BUMED Code 73) will provide additional Navy medical input. Presentations on noise, heat stress, and asbestos control are already planned. Surgeon Commander P.G. Harries, Royal Navy, a world-recognized authority on asbestos will present a paper; he will be a guest of the Deputy Surgeon General on 19 Dec 1973, and will be escorted by BUMED Code 73 on a tour of NSY Norfolk, Va., and NSY Long Beach, Calif., as an expert in asbestos control.

OCCUPATIONAL HEALTH MANUAL

A number of requests for the 1972 Naval Occupational Health Manual are being received. This book describes basic administrative procedures essential to smooth operation of an occupational health program, and is used as the text for "Administrative Aspects of Occupational Medicine," one of two officer correspondence courses on occupational medicine offered by the Naval Medical Training Institute, NNMC, Bethesda. The manual may be purchased for \$5.85 (domestic postpaid) through the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. Stock Number 0845-00014.

BUMED/CRUITCOM, MEMO OF UNDERSTANDING

On 1 Jul 1973, concurrent with suspension of the physician draft, BUMED and Recruiting Command signed a Memo of Understanding concerning Medical Department recruiting. CRUITCOM assumed full responsibility for medical recruiting, canvassing, printed advertising, films, exhibits, and processing of applications. BUMED agreed to furnish technical support and professional assistance as required.

Considerable time has been required to organize the entire effort, and concrete results are not expected much before the 3rd and 4th quarters of this fiscal year. CRUITCOM is actively engaged in recruiting 604 specialists for the Navy Medical Dept., by Jul 1974. ☺

THE GASTROENTEROLOGISTS' CORNER

Achalasia—The Uptight Sphincter

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Clinical Investigation Center,
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INTRODUCTION

Achalasia is a disorder of the esophagus that is characterized clinically by dysphagia, and regurgitation of previously digested food. Physiologically, this disorder is best defined by manometric studies. Early studies, using uninfused water-filled manometry catheters, revealed poor or no peristalsis and a lower esophageal sphincter that registered normal pressure, but failed to relax with swallowing.¹

In 1967 a new manometric technique for measuring lower esophageal-sphincter pressure was introduced, which used a constant infusion of water to keep the recording apertures from being sealed by esophageal mucosa.² The superiority of this system has been well documented, and it has been suggested that all studies of lower esophageal-sphincter function which were performed using the uninfused system, should be suspect.^{3,4} This suggestion would appear to be especially appropriate in the case of achalasia.

The opinions expressed in the above paper are those of the author, and cannot be construed to reflect the views of the Navy Department or the naval service at large.

Recent studies using the infused-manometric technique in patients with achalasia have produced significantly different data. In contrast to what had been previously recorded, patients with achalasia have now been shown to have a significantly increased lower esophageal-sphincter pressure, as well as sphincter relaxation with swallowing.⁵

The purpose of this paper is to present a manometric study of a patient with achalasia using, simultaneously, the infused and uninfused techniques; a comparison between these two methods will be made, and differences between the two systems will be further investigated.

METHOD

Patient.

The patient (A.B.) is a 24-year-old male who presented with a seven-month history of gradually increasing dysphagia, substernal discomfort, and regurgitation of food. X-ray studies of the esophagus revealed the classic beak-like narrowing of the distal esophageal segment, with a moderately dilated esophageal body, and

no evidence of esophageal peristaltic contractions. Endoscopic evaluation revealed a dilated esophagus, with no evidence of esophageal stricture or esophagitis. Manometric findings were characteristic of achalasia, and a methacholine (Mecholyl) test was positive.

Technique.

Esophageal manometry was performed, using an infused system which we have previously described.⁶ Additional studies were conducted using a special catheter which consists of two water-filled polyvinyl tubes measuring 1.4 mm in diameter. This catheter was constructed so that the intraluminal pressures were recorded through two lateral openings at the same level, located 10 cm from the tip. The tube was positioned so that lower esophageal-sphincter pressure was recorded from both apertures, simultaneously. One lumen was infused with distilled water at a rate of .4 ml/minute, while the other tube was only water-filled.

RESULTS

Using a constant infusion of distilled water through the manometry catheter, manometric studies revealed

absent esophageal peristalsis. Occasional low-pressure esophageal waves occurred after swallowing, and spontaneous low-pressure esophageal waves were also demonstrated. Lower esophageal-sphincter pressure was recorded at more than 40 mm of mercury, and there was a definite response to swallowing. Since lower esophageal-sphincter pressure never decreased to gastric level, there was a constant pressure barrier present at all times which prevented the free flow of food from passing into the stomach. (See Figure 1B)

Pressure studies using a water-filled uninfused system are graphically portrayed in Figure 1A. As noted in the infused-system recording, occasional low-pressure esophageal waves were recorded. Lower esophageal-sphincter pressure was measured at 8 mm of mercury, and there was no response to swallowing.

Simultaneous recording of the lower esophageal sphincter, with both infused and uninfused systems is represented in Figure 2A. Although the recording apertures were at the same level, the infused catheter recorded a lower esophageal-sphincter pressure measuring over 40 mm of mercury, while the uninfused catheter recorded a pressure of 9 mm of mercury. A decrease in lower esophageal-sphincter pressure of more

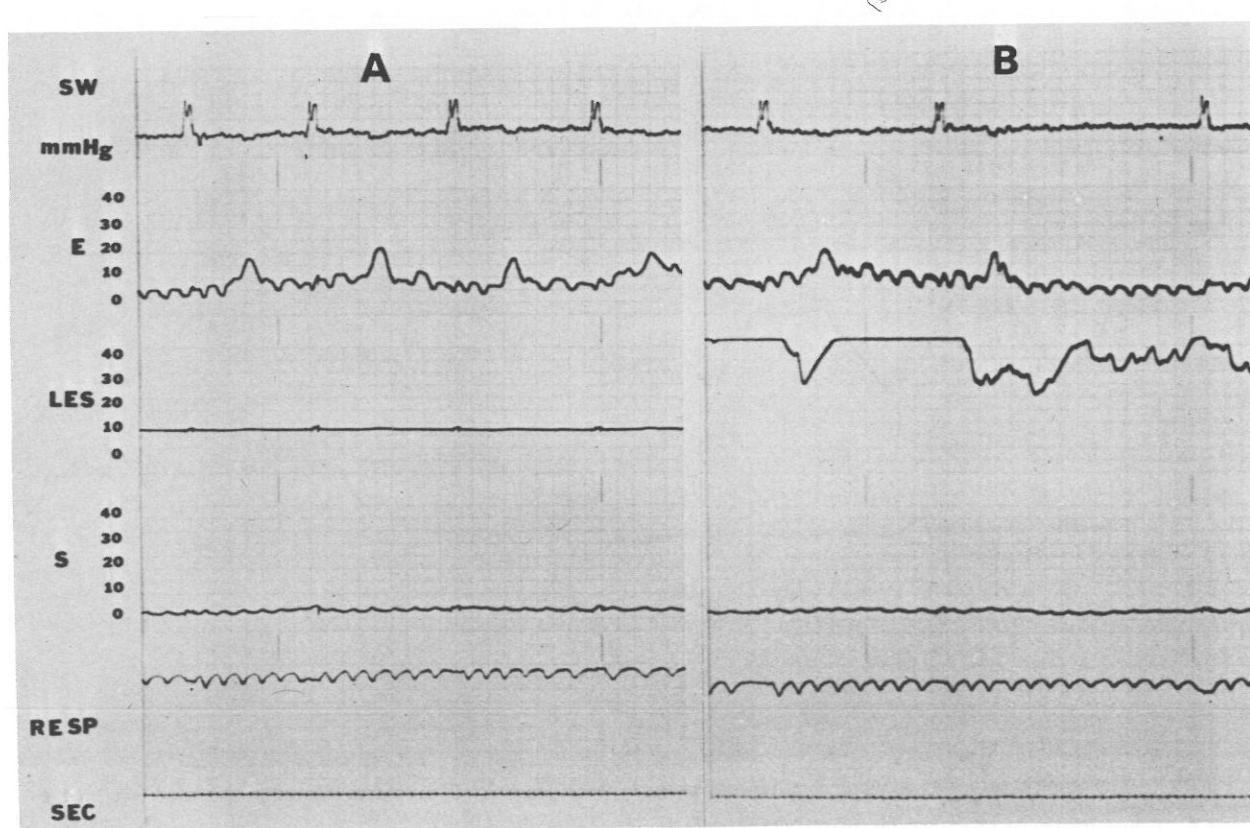


Figure 1.—Manometric recording showing swallow (SW), intraesophageal pressure (E), lower esophageal sphincter pressure (LES), intragastric pressure (S), respiration (RESP), and time (SEC) with an uninfused system (A), and an infused system (B).

than 30 mm of mercury is demonstrated in response to swallowing. However, the lower esophageal-sphincter pressure never dropped below 10 mm of mercury, so that no response to swallowing was recorded by the uninfused system. (See Figure 2A) When the uninfused catheter was infused with distilled water, the pressure rose immediately, and both catheters recorded identical tracings as reproduced in Figure 2B.

DISCUSSION

Although the diagnosis of achalasia can usually be made on the basis of history and radiographic findings, esophageal manometry has simplified the task. In addition, manometry provides a valuable tool for evaluating the effect of therapy. However, to appreciate its full potential, the technique used for recording lower esophageal-sphincter pressure is extremely important.

Since its introduction in 1967, the use of a constant infusion of small quantities of water through the manometry catheter has proven to be the most accurate technique available, in the measurement of physiologic pressure changes. The inadequacy of the uninfused

system, particularly when measuring sphincter pressures, has been well documented and is particularly obvious, when dealing with achalasia patients.^{2,4} The manometric findings observed in this particular patient are characteristic of achalasia, and similar findings have been reported by others who have studied patients with achalasia.⁵ The studies presented herein confirm the previously recognized absent peristaltic activity, but refute the assertion that the lower esophageal-sphincter pressure is normal, and that there is no relaxation with swallowing.

The uninfused catheter records a pressure until the aperture is plugged by esophageal mucosa. When the recording aperture is sealed by mucosa, no further increase in pressure is recorded. The infused system prevents sealing by continuous infusion of water, and so gives a more accurate pressure recording. After swallowing, there is a decrease in pressure at both recording apertures. However, the pressure decrease is insufficient to unseal the uninfused catheter; therefore, no change in pressure is recorded using the uninfused system.

Recent studies, using quantitative lower esophageal-sphincter manometry, have greatly improved our

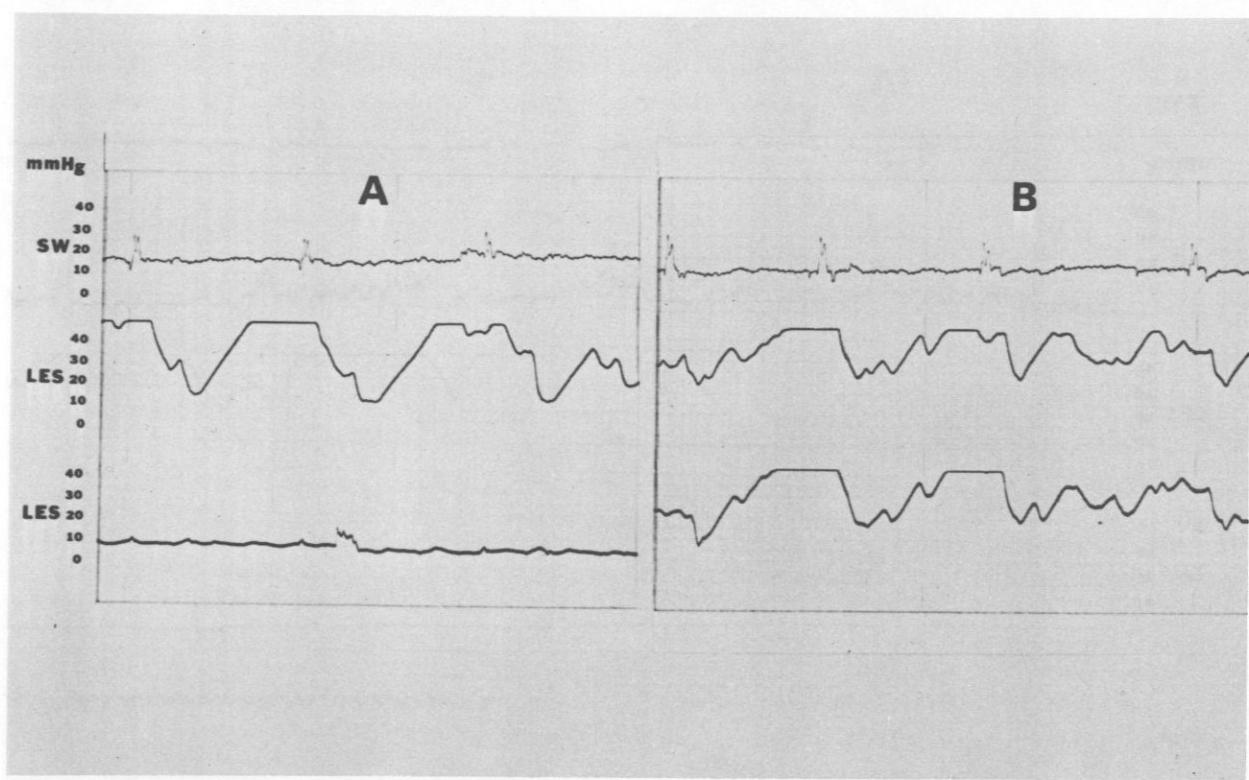
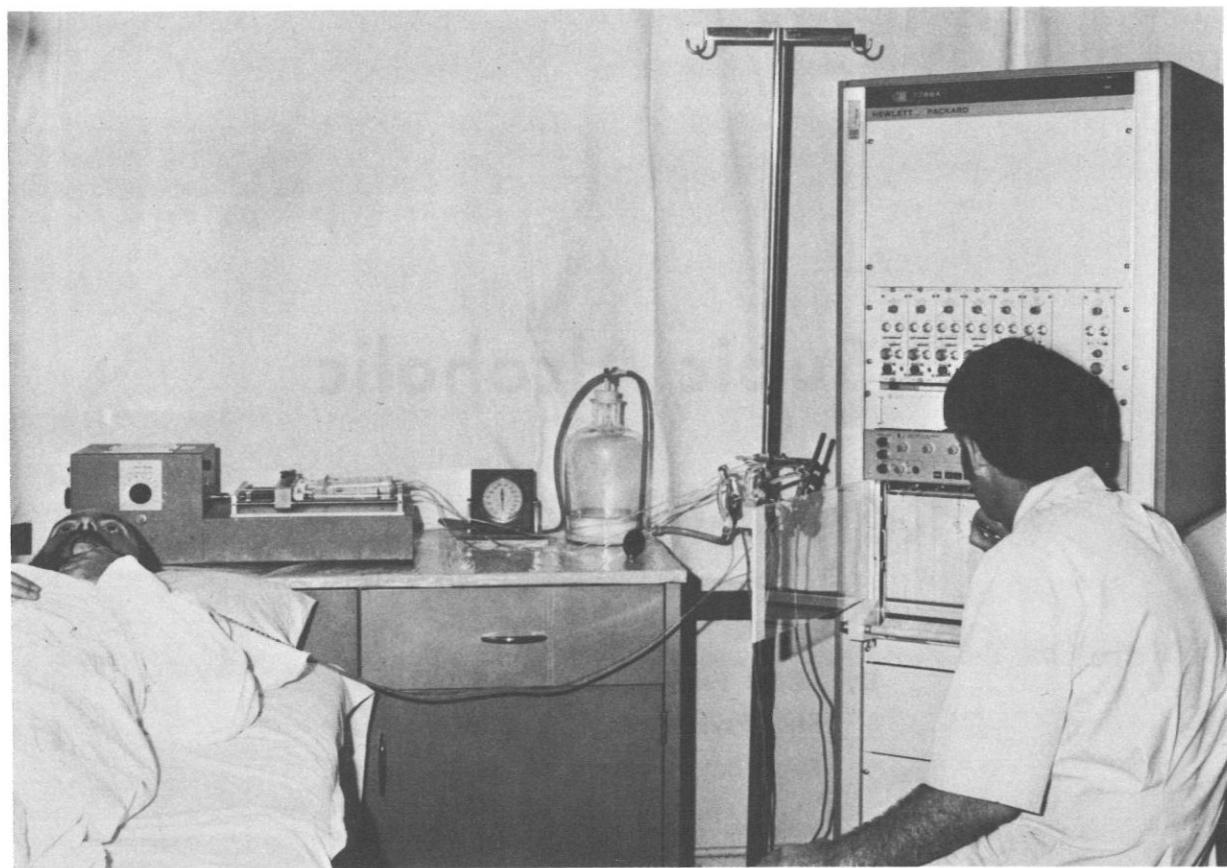


Figure 2.—Manometric recording showing simultaneous pressure recording through apertures located at the same level in the lower esophageal sphincter (LES).

- Upper tracing of LES pressure was recorded using a constant infusion, and lower tracing of LES pressure was recorded without infusion.
- Both LES tracings were recorded using constant infusion of water.



MANOMETRY SYSTEM IN USE AT THE NAVAL HOSPITAL SAN DIEGO.—The necessary components (left to right) are: infusion pump, transducers, and direct-writing recorder.

understanding of the pathophysiology of achalasia. The finding of sphincter supersensitivity to both gastrin, and other cholinergic stimulation, suggests the likelihood of sphincter denervation (Cannon's Law).⁵ In addition, the preservation of lower esophageal-sphincter response to cholinergic stimulation after pretreatment with a cholinesterase inhibitor suggests that the site of denervation is preganglionic, and that the ganglion and postganglionic-cholinergic nerves are intact.⁷ It is anticipated that, with a greater understanding of the pathophysiology of this disease, an effective medical therapy may evolve.

Lower esophageal-sphincter manometry suggests that the term "cardiospasm," which is occasionally used to describe this condition, is physiologically appropriate. Our findings also indicate that the term "achalasia" is somewhat inappropriate, because considerable relaxation of the lower esophageal sphincter may occur with swallowing. It would appear that the term "dyschalasia" best describes the relaxation abnormality which is seen in this disorder.

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Subic Alcoholic Rehabilitation Unit

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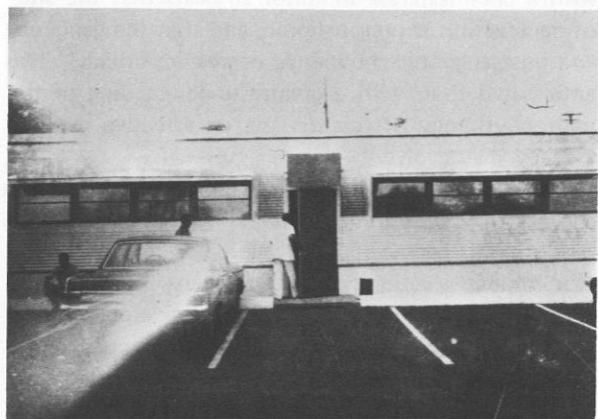
The Alcoholic Rehabilitation Unit (ARU) was effectively opened at Subic Bay on 11 April 1973, with the institution of a 15-bed, inpatient unit. Prior to that time, identified alcoholics were detoxified in the general U.S. Naval Hospital, transferred to the Psychiatric Service for interim treatment and disulfiram (Antabuse) therapy, and air-evacuated to definitive sites in CONUS. With the establishment of the Subic Alcoholic Rehabilitation Unit (ARUS), it became possible for all identified alcoholics to undergo treatment locally with a full range of treatment modalities — medical, psychiatric, vocational, and Alcoholics Anonymous (AA). After the completion of therapy, rehabilitees become available for further disposition via BUPERS.

RESOURCES

Material.

ARU Subic consists of a 15-bed unit which, though physically separated from it, depends on the main hospital for all of its support. All of the ARUS personnel,

materials, and staff are derived from hospital resources. The only exception is SKI Meadly, USN who is presently assigned on temporary additional duty (TAD) from the Naval Supply Depot, and is the area CODAC (Collateral Duty Alcohol Counselor) Representative. Attached to the unit proper is an adequate conference room which accommodates up to 30 patients, if needed, with the necessary furniture for their comfort. Adequate office space is also available in the immediate vicinity.



ENTRANCE.—ARU Subic, Annex Wing.

The opinions or assertions contained in the above article are those of the author and are not to be construed as official or representing the views of the Navy Department or the naval service at large.



TO SUCCESS.—The day starts with the morning Antabuse.



FIVE NIGHTS A WEEK.—The evening AA Meeting.

Personnel.

Personnel at the professional level consists of: a psychiatrist director, administering the ARU as a collateral duty; one trained nurse; and a general medical officer to handle medical problems. The CODAC Representative, SKI Meadly, is available for full-time therapy, and is essentially in charge of the unit. One corpsman is present and available to provide administrative assistance to SKI Meadly.

Augmenting the program as permanent personnel, though functioning in a part-time voluntary status, are two civilian GS-12 employees and one Navy Chief; they are all former alcoholics who have volunteered to hold AA meetings, and serve as part-time personnel on the staff, contributing to lectures and discussions. The local Red Cross Director, Mrs. Rhame, has also volunteered to supervise recreational activities and arts and

crafts, on a regular basis. Alternating with Father Palafax, Chaplain Kennon provides spiritual guidance; he has volunteered to serve as chaplain, in addition to managing two hours of therapy per week on a regular basis. All voluntary personnel are scheduled for regular discussions on a weekly basis, and usually assist in the AA meetings conducted in the evening.

PROGRAM

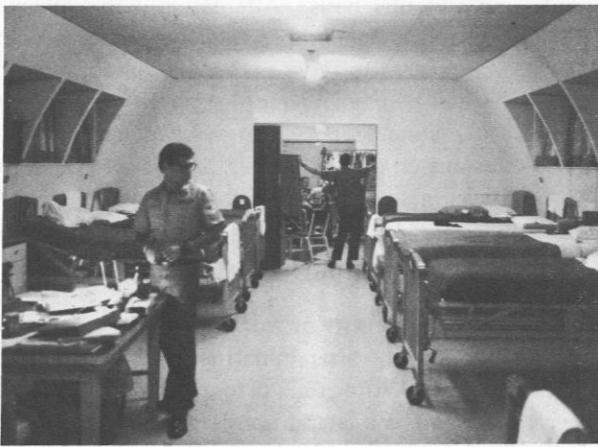
The program consists of from six to eight weeks of inpatient treatment after initial detoxification in the hospital setting. After such detoxification as may be necessary, there is a lateral transfer to the ARU where rehabilitation begins with a program consisting of the AA regimens, i.e., education, fellowship, confrontation, and "team effort." Lectures, films, group-therapy seminars, and literature on alcoholism are regularly



AA MEETING.—Another active evening session.



IMPROMPTU.—Some AA meetings are less formal.



DAILY SESSION.—Counselor "Hot Seat."



dispensed, along with mandatory AA meetings conducted six times a week. Regular psychiatric evaluation and treatment are rendered after abstinence is accomplished, and each patient is thoroughly evaluated physically with particular emphasis on detection and treatment of alcohol-related disorders. Spiritual guidance is obtained in weekly visits and group sessions with Chaplain Kennon. A new "life style," especially in the area of recreation, is considered imperative in our treatment plan; this is administered daily by Mrs. Rhame, the Red Cross Area Representative. Arts and crafts are made available on a daily basis, and a weekly "recreational outing" is scheduled and mandatory for all patients. In the past, these outings have included picnics and boat trips. Physical exercise and daily recreation are also mandatory, with all personnel participating; such activities as softball, volleyball, tennis, and exercises are led by the more athletically inclined members of the group.

A patient government is formed, consisting of the Chief Master-at-Arms for the unit and an assistant, who

speaks to the staff for the whole community in matters which patients consider significant, or important enough to bring to the attention of the staff. This structure is maintained in order to extend the militarily oriented atmosphere into which each patient must necessarily return after treatment is accomplished. As described above, the "therapeutic community" represents another avenue of treatment whereby patient government may apply its own pressures to the treatment of all participants.

Medical treatment consists of daily Antabuse therapy, and treatment of any medically related disorders.

PATIENT POPULATION

At least six patient populations that are presently being subserved by our program are:

1. Inpatient populations (as described).
2. An outpatient population.
3. Transient air-evacuated population, i.e., those awaiting air-evac to CONUS for rehabilitation when the ARUS has no available beds for treatment.
4. Dependents of inpatients, ALANON (Organization for Families of Alcoholics).
5. Civilian alcoholics, i.e., government employees, civilian merchant marine sailors.
6. Transient personnel, i.e., visiting personnel on a semi-regular basis from ships, nearby commands, etc.

The *inpatient population* has already been referred to and described. The second type of population, *out-patient*, is involved in an experimental program that was felt to be urgently necessary for the treatment of local-command personnel stationed at Subic, Cubi, or San Miguel. There are men with families in the area who regard themselves as alcoholics despite the absence of overt stigma of severe work or legal problems, and



AFTER HOURS.—A view of the living space.



GUEST SPEAKERS.—Through the courtesy of the local AA group.



who desire rehabilitation locally. With the approval of their local commands, these persons attend all available rehabilitation efforts for specified periods of time, i.e., four to six weeks, daily, 7 A.M. until 9 P.M., and they receive Antabuse therapy under hospital guidance. After the day on which such activities are concluded, these individuals return to their local commands, or home. There are approximately 12 patients in this status who are presently undergoing treatment. We are observing this patient population closely to test the effectiveness of such an experimental regimen.

For *transient personnel*, i.e., those awaiting air-evac to CONUS for treatment of alcoholism, the full-treatment program is made available during their stay at the USNH Subic Bay and ARUS. At any one time, this patient population consists of approximately three to five patients.

For treatment of *dependents* in the area, especially the dependents of our outpatient treatment group, *ALANON* has been instituted; every Thursday night

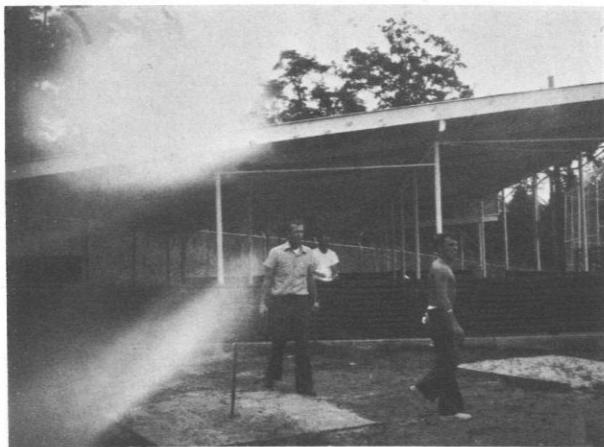
there is an open AA meeting for patients and dependents. This patient-dependent population presently consists of approximately six to ten dependents, although it is expected to increase substantially in the future.

Our *civilian alcoholics*, who want to participate in AA meetings number approximately six to ten people, although new personnel are appearing daily as news of our program spreads. Nightly AA meetings are available to these individuals, whose number varies daily with the number of MSTS ships in the area, or in accordance with other variables affecting the civilian population. Tuesday night is especially allocated for joined meetings with the civilian population, although some civilians are present at any nightly meeting.

Other military *transient personnel*, i.e., those *stationed aboard local ships*, represent another patient population which we serve. The number varies daily (generally from two to five), according to time and



AFTERNOON RECREATIONAL PERIOD.—An important aspect of the daily routine is physical, in the form of softball, volleyball, basketball, jogging, etc.



increasing knowledge of our existence; it is anticipated that this important segment of the military population, which we will be expected to serve, will increase significantly. Nightly AA meetings are offered, and active participation in seminars and discussion groups is encouraged.

ANCILLARY PROGRAMS

An educational program is being sponsored by the ARUS, which sends "teams" of patients and staff to visit the various local commands, to show films and distribute literature on alcoholism. The Naval Hospital's ARU is becoming a center which can be visited by drug and alcoholic-duty officers, to secure information about alcoholism, and also to discuss various programs, methods of detoxification, treatment, and education that can be applied in assisting their local alcoholic and nonalcoholic clients. At least four or five independent-duty corpsmen have visited our unit, for



SQUARE DANCE.—Social activity is provided on a Wednesday evening after meeting.



SOCIAL NIGHT.—On a typical Wednesday evening.

example, to inquire into Antabuse-maintenance therapy. This knowledge was highly useful in supporting their alcoholic personnel who had recently been rehabilitated elsewhere.

A liaison has recently been established with the officers of the Medical and Chaplain Corps at San Miguel Communication Center, as a prelude to the initiation and organization of AA meetings at the latter facility. Four patients from that area, who are presently undergoing treatment at ARUS, will form the nucleus for satellite weekly AA meetings to be conducted at San Miguel. In the near future we will also sponsor additional educational efforts at that command, by offering films and question-and-answer sessions presented by our personnel.

A proposed "Crisis Intervention Center" is in the planning stages. The method will allow anyone situated locally, who may need information or assistance in dealing with any aspect of alcoholism, to obtain appropriate help anonymously by calling our Center at any time. This telephone service will be administered by our senior rehabilitees, and will enable us to contact those "anonymous alcoholics" who feel they need help, but who are either ashamed, or afraid to seek it personally. Sound advice and support can therefore be obtained without sacrificing anonymity.

The concept of extending a physician's medical effectiveness and impact, by organized employment of trained assistants and dedicated laymen, is nowhere better illustrated than in the management of alcoholics. As Navy Medicine adapts to the many designs for improving the responsive delivery of health-care services, it is to be hoped that appropriate benefits will accrue to those afflicted by the scourge of alcoholism, and to those who aspire to help the afflicted. ♦

Psychiatric Occupational Predictors: Application to Drug Rehabilitation Cases

**By LT Darrel Edwards, MSC, USN,
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In response to the 1971 Presidential direction to establish detoxification and rehabilitation facilities for military drug users, the armed forces have initiated large-scale drug rehabilitation programs for those members of the services who present drug-related problems. Screening procedures were initiated to identify high drug risks in the armed services. In the Navy an initial examination of screening revealed that "Odds for First-Term Enlistment Effectiveness" scores developed by Plag, et al.,³ could have screened out, before induction, 26.4% of a sample of the first 385 drug users who were referred to Navy treatment programs. The other 73.6% would have filtered through the screen. Those who cannot be screened *out* must be treated *in*.

The occupational structure of the Navy requires that a disposition be recommended by treatment-program personnel to the administrative branch of the Naval service. The time expenditure which assessment and intervention represent, makes evident the necessity to employ selective strategies in treatment. Some men could undertake treatment with the goal of rehabilitation for further duty, while others would be oriented toward a sound, productive life out of the service. An early assessment of in-service effectiveness potential would be of value in implementing an efficient treatment program.

Berry, Edwards, Iorio, and Gunderson¹ reported

actuarial-odds scores for postpsychiatric sick-list military effectiveness. Their study was initiated in 1967 with an 18-month data-collection period. Each psychiatric case that was recommended for return to military service was followed for two years, or until military discharge supervened. All cases represented in the "Odds for Effectiveness" tables were defined as "effective" or "failure." Effectiveness was defined as both (1) completing the current enlistment, and (2) being recommended for reenlistment at the time of discharge from the service. Of the men who were still on active duty in December 1971, those who completed enlistment initiated before hospitalization, and those with less than six months' obligated service remaining after discharge from the hospital were set aside for separate consideration. The outcome is not determined in the former situation, and the outcome is atypical in comparison with the larger sample in the latter instance. Those patients who returned to duty but did not complete their enlistments, or who were not recommended for reenlistment, were defined as failures. There were 2824 sailors included in the analysis. The present study represents an attempt to use odds scores derived by Berry, et al.,¹ to provide some assistance in arriving at a treatment strategy for drug users in the U.S. Navy.

METHOD

Subjects

Included in the study were 458 Navy-enlisted drug users who were admitted to voluntary-treatment programs under amnesty conditions during 1971.

This study was supported by the Bureau of Medicine and Surgery, Department of the Navy under Research Unit M4305.07-3005DGA5.

The opinions expressed in the above paper are those of the author, and are not to be construed as official or as necessarily reflecting the views or endorsement of the Department of the Navy, or the naval service at large.

TABLE 1

Comparison of Demographic Characteristics of Navy Enlisted Strengths,
Navy Enlisted Psychiatric Patients, Navy Enlisted Personality Disorders,
and Miramar Navy Enlisted Drug Abusers

<u>VARIABLE</u>	% OF SAMPLE			
	NAVY STRENGTH (No.=536822)	ALL PSYCHIATRIC PATIENTS		
		PERSONALITY DISORDERS ONLY		DRUG ABUSERS (No.=458)
Diagnosis				
Psychosis		11		
Neurosis		17		
Personality Disorder		64		
Situational Maladjustment		8		
Pay Grade				
E-8 and E-9	2	2	.3	.1
E-6 and E-7	22	21	5	1
E-3 through E-5	64	57	55	71
E-1 and E-2	12	20	40	28
	n.s. ^a	.01		n.s.
Age				
17 - 18	2	9	10	25
19 - 20	16	42	48	48
21 - 25	50	30	30	24
26 - 30	12	9	6	1
31+ -	20	10	7	2
	.01	n.s.		.01
Years Service				
<1	53	57	69	
2 - 3	19	21	23	
4 - 9	15	14	7	
10 - 14	7	4		.3
15 - 40	6	4		.3
	n.s.			.05
Marital Status				
Married	31	28	13	
Single	69	72	87	
	n.s.			.01
Disciplinary Action in Past Year				
No	75	69	51	
Yes	25	31	49	
	n.s.			.01
Education (High School Graduate)				
Yes	63	62	56	
No	37	38	44	
	n.s.			
Job History (Ever Fired)				
No; no prior job	92	90	92	
	n.s.			

^ap of χ^2 differences between distributions

Procedure

First, the demographic characteristics of the drug-user sample were examined. Secondly, an estimate of the return-to-duty rate of the sample was made. Finally, the effectiveness scores developed by Berry, et al.,¹ were applied to the 458 treated, drug-user cases included in this study.

RESULTS AND DISCUSSION

Demographics

Initially, the sample was compared with the previously used inpatient sample,¹ and with a special subsample constructed from the inpatient files of diagnosed personality disorders (the usual diagnostic psychiatric classification for drug users), in order to establish a suitable context for interpretation of the user data. In addition, age and pay grade of the total Navy population (1971) were inserted for further base-line interpretation. The results are summarized in Table 1.

Being unrated was associated with personality disorders and drug users, while the total psychiatric sample had a distribution similar to that of the total Navy strength population. The psychiatric sample and the personality-disorder group were composed of younger men than the total Navy population, but the drug-user

population was clearly the youngest. Hence, the drug users were younger than members of the other samples, but the younger users were equal in rate to the older sample of personality disorders. Two factors may account for the similarity: (1) It is easier to advance quickly through the initial ranks, and; (2) The nature of the user's problem probably leads him to intervention, before the promotion lag that characterizes the personality disorder's occupational retardation, can occur.² As one might expect, fewer drug users (being younger) were married. Significantly, the drug treatment sample contained proportionately more cases of disciplinary action than either the general-psychiatric sample, or the personality-disorder sample. The average user was younger, unmarried, early in his service obligation, and evidenced acting-out behavior.

Clinical Evaluation

Initially, the clinical evaluation that a man should be recommended for return to duty must be estimated. Most men in the sample were treated for 60+ days. The usual diagnosis encountered in the drug-user sample was "Character and Behavior Disorder." The return-to-duty recommendation reflected clinical judgment which was based on pertinent history, and response to the treatment program. Berry, et al.,¹ have provided an estimate of clinical decisions which are summarized in Table 2.

TABLE 2
Clinical Odds Scores for Navy Psychiatric Patients

<u>DIAGNOSIS</u>	<u>NUMBER OF DAYS ON SICK LIST</u>	<u>YEARS OF SERVICE</u>	<u>ODDS FOR EFFECTIVENESS</u>
Character and Behavior Disorders	0 - 30	15 - 40 10 - 14 4 - 9 2 - 3 0 - 1	65 29 15 8 5
	31 - 60	15 - 40 10 - 14 4 - 9 2 - 3 0 - 1	48 16 7 3 2
	61+	15 - 40 10 - 14 4 - 9 2 - 3 0 - 1	42 12 5 2 1

TABLE 3
Odds for Effectiveness Scores for Navy Psychiatric Patients

<u>PAY GRADE</u>	<u>WIFE'S ATTITUDE TOWARDS SERVICE</u>	<u>AT LEAST ONE DISCIPLINARY CAPTAIN'S MAST OR COURTS MARTIAL</u>		<u>ODDS FOR EFFECTIVENESS</u>
		No	Yes	
E8 - E9	Positive	No	99.9	
	Neutral,	Yes	98	
	Negative	No	99.5	
	Single	Yes	92	
E6 - E7	Positive	No	95	
	Neutral,	Yes	67	
	Negative	No	99.5	
	Single	Yes	92	
E3 - E5	Positive	No	79	
	Neutral,	Yes	84	
	Negative	No	43	
	Single	Yes	84	
E1 - E2	Positive	Yes	12	
	Neutral,	No	65	
	Negative	Yes	72	
	Single	No	43	
	Positive	Yes	51	
	Neutral,	No	51	
	Negative	Yes	12	
	Single	No	28	
	Positive	Yes	17	
	Neutral,	No	12	
	Negative	Yes	1.5	
	Single	No	51	

TABLE 4
Odds for Effectiveness Scores for Navy Enlisted Drug Abusers

<u>GROUP</u>	<u>NO.</u>	<u>% OF SAMPLE</u>	<u>ODDS SCORE</u>
Married, No Disciplinary Action in the Past Year:			
E8 - E9	0	—	99.9 ^a
E6 - E7	2	.4	99.5
E3 - E5	25	5.6	89
E1 - E2	2	.4	72
Single, No Disciplinary Action in the Past Year:			
E8 - E9	0	—	95
E6 - E7	1	.2	84
E3 - E5	138	30.9	51
E1 - E2	61	13.6	17
Married, Disciplinary Action in the Past Year:			
E8 - E9	0	—	98
E6 - E7	0	—	92
E3 - E5	23	5.1	65
E1 - E2	5	1.1	28
Single, Disciplinary Action in the Past Year:			
E8 - E9	0	—	67
E6 - E7	0	—	43
E3 - E5	117	26.2	12
E1 - E2	72	16.1	1.5

^aUsing the best Psychiatric Odds Score for each group.

Ninety-nine percent of the sample had less than 10 years of active duty. The chances that a man, with the characteristics of men in the drug-user sample, would be returned to duty rarely exceed 15/100. Hence, the decision to return a man to duty would be made carefully, and would occur rarely. Eleven percent of the men were being returned to active duty during the first half of 1972.

Effectiveness

Effectiveness was then estimated by applying the "Odds Score" of Berry, et al.,¹ to the drug sample. It was assumed that all married men had the best possible wife (supportive and positive). Such an assumption maximizes the odds score, thus providing a conservative (most optimistic) effectiveness score in each case. Table 3 summarizes the "Odds for Effectiveness Scores" computed for the Navy sample. Each case in the drug sample was classified into one of the 24 cells in Table

3. The odds score from the appropriate cell was then assigned to the respective case in the drug sample. This assigned score represented the estimate of effectiveness used in the analysis.

The drug-user sample was analyzed, using a bivariate-distribution technique, to determine the odds for effectiveness in each case. The results are summarized in Table 4.

Eleven and seven-tenths (11.7) percent of the sample had odds scores which suggested a successful return to duty (≥ 65). Thirty and nine-tenths (30.9) percent were marginal (51), and 57.4% had odds scores clearly indicative of failure (≥ 43).

The drug-treatment sample, on the whole, resembled poor psychiatric risks seen in Navy hospitals. These men are seldom responsive to treatment, and are usually poorly motivated for military duty.

Although the application of the prediction system to the drug sample rests upon several assumptions, the

results provide an additional piece of information for decision makers in the Navy. The dispositions assigned to men in the program, and the direction of the program may, in part reflect the outcome information (Odds for Effectiveness) provided to the system. The man with a good service record and earned rate appears to be a successful candidate for a return-to-duty treatment orientation.

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2. Erickson JM, Edwards D and Gunderson EK Eric: Status congruency and mental health. Unit Report No. 72-33, Navy Medical Neuropsychiatric Research Unit, San Diego, 1972.

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CONFERENCE ON MEDICAL COMPLICATIONS OF ALCOHOL ABUSE

Coinciding with Drug Abuse Prevention Week proclaimed by the White House for 7-13 Oct 1973, a Conference on Medical Complications of Alcohol Abuse was conducted on 11-12 Oct in Washington, D.C., at the Washington Hilton Hotel.

The conference was co-sponsored by the AMA, the Veterans Administration, the National Institute on Alcohol Abuse and Alcoholism, and the National Council on Alcoholism. The program was coordinated by RADM William M. Lukash, MC, USN, White House physician.

Thirteen hours of continuing-education credits toward the AMA Physician's Recognition Award program, and 13 hours of elective credits in the program of the American Academy of Family Practice were allowed for participation in the conference.

Conference speakers considered such topics as: how to diagnose alcoholism, how to identify the potential alcoholic early in his course, current approaches to treatment, biochemical features of alcohol ingestion in man, direct poisonous effects of alcohol, cause of death in alcoholics, management of acute medical emergency in alcohol abuse, skin and blood problems, nutritional problems, and management of infection in alcoholics.

The final afternoon session was devoted to the development of treatment plans, and appropriate use of medications. Treatment programs were discussed in the context of family therapy, group therapy, the role of clergymen, community social agencies, and self-help agencies such as Alcoholics Anonymous.

In its published statement on "Alcohol and Society," the AMA Committee on Alcoholism and Drug Dependence concludes:

"Although a small quantity of alcohol can serve as a

relaxant, further consumption, often under the guise of social drinking, can have adverse physical and psychological consequences.

"Impaired decision-making ability and reduced perceptual acumen are frequently the immediate results of intoxication; and drug dependence, as well as physical and psychological debilitation, are possible long-range results of consistent alcohol abuse."—AMA News Release, Chicago, Ill.

MEETING ON GASTROINTESTINAL NEOPLASMS

A meeting will be held on 9-10 Nov 1973 at the National Naval Medical Center (NNMC), Bethesda, Md., which will address "The Current Management of Gastrointestinal Neoplasms." This symposium is sponsored by the Departments of Gastroenterology, General Surgery and Thoracic Surgery at NNMC, Bethesda.

The meeting is open to any Naval medical officer, and special effort has been made to invite Navy physicians assigned to units throughout NNMC, Bethesda. Conference participants include NNMC staff members, as well as highly qualified civilian consultants.

Dr. Frank Rischer, Ph.D., Head, National Cancer Institute, who is directing the government-sponsored effort to eradicate cancer, will deliver the keynote address.

Speakers from the Armed Forces Institute of Pathology will discuss the genetic aspects of gastrointestinal malignancy, and related environmental factors.

CAPT Roger Milnes, MC, USN, Head of Professional Services at Naval Hospital San Diego, will be included among the members of two of the major panels. CAPT Milnes is participating under the auspices of the In-Service Consultant Lecture Program which is sponsored by BUMED.

Read on Macduff...

The following "immortal classics" have been gleaned from numerous medical reports which have been brought to our attention. If you commonly sign reports without reading them, you may be dubbed Macduff. Names and identifying marks have been omitted to protect the guilty. The source material is so extensive that our readers are urged to assist by contributing any "Read on Macduff's" which may be encountered elsewhere.

In the operating room we have control over only a small, but most important faucet of the patient's hospitalization. And it's a darn sight harder to turn it off than it is to turn it on.

"The recruits suffered renal track illnesses after five or six exercise sessions of 15-20 minutes each during a 36-hour period, which included pushups. The renal track is located in the area of the kidneys." This item of Olympic proportions appeared in NAVY TIMES, p. 2, 21 Jul 1971. (It's nice to know lay brethren share our talents).

Benefits of the Vivonex were that the patient could maintain a 2000-colonic intake up to the day of surgery . . . Incredible. Where's that faucet?

The studies included complete blood counts, platelet counts, fibrinogen levels, total proteins, total lipids, plasma hemoglobin, free-fatty acids, and osmotic fragility . . . and you just can't beat smelly old fragility, for all that.

The patients received randomly 60 ml of antacids by mouth, and were then reexamined blindly by the radiologist looking for reflux of barium. We suppose that radiologists must accept their share of hostility.

Heller, in 1963, studied PaO₂s only for a period of five minutes . . . and five minutes well spent, too.

Due to the effectiveness of Group-C vaccine, only two patients were admitted to this hospital. Oh well, who needs to keep busy anyway.

The red-cell morphology was abnormal, but not spedivic . . . a nonspecific, anemic chap with a cold in the nose.



The entomologist spoke on medical and economic pests in the Philippines . . . endemic there too?

Tissue has been collected from 55 patients to date fixed in glutenaldehydeosmium solution and processed for examination. They must really be ready, for something.

The incidence of energy in this group of patients with acute viral hepatitis was significantly higher than in a group of age and sex-matched controls. It's an ill wind that doesn't blow some good, after all.

When 100 feet have been collected, the data will be correlated and submitted for publication . . . we're infinitely more interested in who gets the feet.

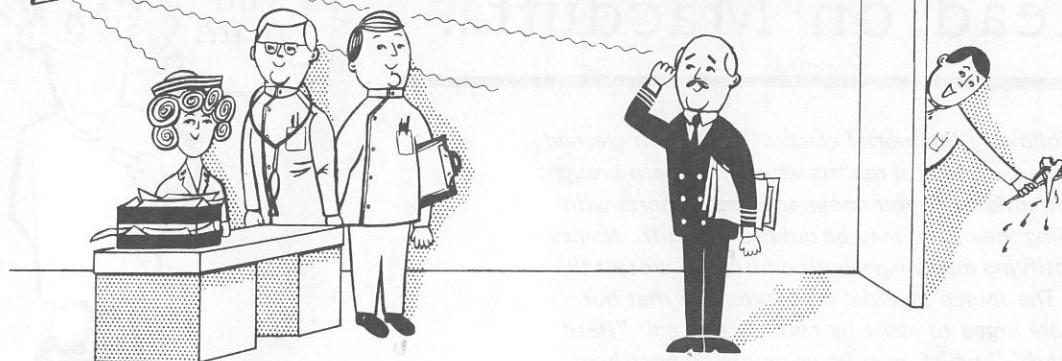
The physician may order laboratory procedures on the patient which will be transmitted to the laboratory's cathode-ray tube (CRT). And some patients think they are treated as inanimate objects.

The physician can review additional data on the patient which is stored in the computer. The one who was lost to follow-up?



"bilateral pes plantus" ☺

Notes and Announcements



CHANGE IN ASSISTANT CHIEFS OF BUMED

RADM John P. Arthur, DC, USN, Assistant Chief of the Bureau of Medicine and Surgery for Dentistry, and Chief of the Dental Division during the period 1 Jul 1972 to 30 Sep 1973, retired on 1 Oct 1973 after 32 years of active service in the Navy Dental Corps. Prior to his retirement, RADM Arthur was presented the Legion of Merit for exceptionally meritorious conduct in the performance of outstanding service at BUMED. RADM and Mrs. Arthur will reside at Casa Villa, 1780 South Oak Street, Albany, Oregon 97321.

RADM Robert W. Elliott, Jr., DC, USN has succeeded RADM Arthur as Assistant Chief of BUMED

for Dentistry, and Chief of the Dental Division. RADM Elliott holds a Bachelor of Metallurgical Engineering degree from Ohio State University, and earned his Doctor of Dental Surgery degree in 1950 at Case Western Reserve University in Cleveland. Prior to commissioning as a LTJG in the Navy Dental Corps in 1959,



CONGRATULATIONS.—VADM Donald L. Custis, MC, USN (left), the Surgeon General congratulates RADM John P. Arthur, DC, USN (right) after presenting him the Legion of Merit in recognition of outstanding service as Chief of the Dental Division and Assistant Chief of the Bureau of Medicine and Surgery for Dentistry (BUMED, Code 6).



HEAD OF THE DENTAL CORPS.—RADM Robert W. Elliott, Jr., DC, USN.

RADM Elliott had served in the Navy as an enlisted man, a Reserve midshipman, and an ensign, line officer. As a former Dental Editor of U.S. NAV MED, he contributed much effort and enthusiasm in upgrading the quality and quantity of contributions from dental officers and commands. Upon promotion to his present rank on 1 Oct 1973, he was appointed Assistant Chief for Dentistry and Chief, Dental Division, BUMED. The choice was heartily applauded by all who have had the pleasure of working with Admiral Elliott.

RADM Charles L. Waite, MC, USN is now conducting a reorganization study of the Bureau, to consolidate all medical support for operational forces under a single-digit code, which he will ultimately head as an Assistant Chief for Operational Support.

Admiral Waite is also Chairman of a newly established Planning Board, which will recommend to the Surgeon General in a formal report to be submitted in March 1974, a detailed plan for the creation of a single focus for education and training within the Navy Medical Department. The individual component activities will compete for available resources, and will be highly responsive to the needs of the Chief of Naval Operations, and the Surgeon General.

Among the many members of component committees of the Planning Board which met during the week of 15-19 Oct at NNMC, Bethesda, are: RADM R.L. Baker, MC, USN, Chairman of the Organization, Mission & Objectives (OMO) Committee; CAPT D.M. Gragg, MC, USN, Chairman of the Requirements Committee; CAPT S. Barchet, MC, USN, Chairman of the Inventory Committee; and CAPT P.A. Flynn, MC, USN, Chairman of the Analysis & Synthesis Committee.

In the near future, members of the Inventory Committee will visit all commands to get a detailed perspective of training that is presently being provided, and what it costs. It is hoped that those commands which are visited will assist these officers in every possible way, since their task is difficult, complex, and of great importance to all. Every member of the Navy Medical Department stands to profit from a sound, effective, well coordinated education and training command.

The next meeting of the Planning Board is scheduled for 4-6 Dec 1973 at NNMC, Bethesda, and will be followed by a plenary session.

We wish RADM Waite well in these challenging efforts which he has been chosen to direct. The times seem to require that physician leaders be doers, and dynamic innovators. The Admiral amply meets those requirements.



NEW ASSISTANT CHIEF OF BUMED.—RADM Charles L. Waite, MC, USN, BUMED Code 8. 

UNIFORMED SERVICES UNIVERSITY OF HEALTH SCIENCES

Chairman of the Board of Regents of the Uniformed Services University of the Health Sciences, David Packard, has announced the appointment of committee members to assist in the selection of a site upon which to build the University, and to assist in developing a staff for the medical school.

In addition, Mr. Packard announced the appointment of CAPT Melvin Museles, MC, USN as the first Executive Secretary of the Board.

By a recent Act of Congress the University was established to educate and train physicians and other health-care professionals for the uniformed services. The University is required by law to begin providing a minimum of 100 physicians per year by 1982.

The members of the site-selection committee are: Former Congressman Durward G. Hall, M.D., Springfield, Mo.; H. Ashton Thomas, M.D., New Orleans, La.; Joseph D. Matarazzo, Ph.D., Portland, Oreg.; and Richard S. Wilbur, M.D., Chicago, Ill.

Serving on the committee to begin searching for a chief executive and to assist in developing a supportive staff for the school are: Anthony R. Curreri, M.D., Madison, Wis.; Former Army Surgeon General,

LTCM Leonard D. Heaton, Pinehurst, N.C.; Alfred A. Marques, M.D., San Francisco, Calif.; Malcolm D. Todd, M.D., Long Beach, Calif.; and Charles E. Odegaard, Ph.D., Seattle, Wash.

The appointments were made at a meeting of the Board of Regents held on 11 Sep in Washington, D.C.

The University will be under development for several years before the first medical students can be accepted.
—PAO, ASD, Washington, D.C. 

NATIONAL RESEARCH COUNCIL — BUREAU OF MEDICINE AND SURGERY POSTDOCTORAL RESEARCH ASSOCIATESHIPS PROGRAM

The Navy's Bureau of Medicine and Surgery and the National Research Council — National Academy of Sciences have selected five Navy research activities to offer postdoctoral research associateships. BUMED's research, development, testing, and evaluation (RDT&E) activities selected for the program are:

- . Naval Medical Research Institute, Bethesda, Md.
- . Naval Aerospace Medical Research Laboratory, Pensacola, Fla.
- . Crew Systems Department, Naval Air Development Command, Warminster, Pa.
- . Naval Submarine Medical Research Laboratory, Groton, Conn.
- . Navy Medical Neuropsychiatric Research Unit, San Diego, Calif.

The objectives of the program are to provide postdoctoral medical, biological, and behavioral scientists and biomedical engineers with unusual capabilities and promise opportunities for research on military problem-oriented projects, consistent with the biomedical research effort of BUMED's RDT&E laboratories. The credentials of the research advisors and scientific merits of the programs of each laboratory are approved by the National Research Council (NRC). Candidates applying for these associateships must have received the equivalent of an M.D. or Ph.D. degree. The NRC screens the records of the candidates and selects those worthy of appointment.

For details on application, specific fields of interest, and a list of the supporting documents write to:

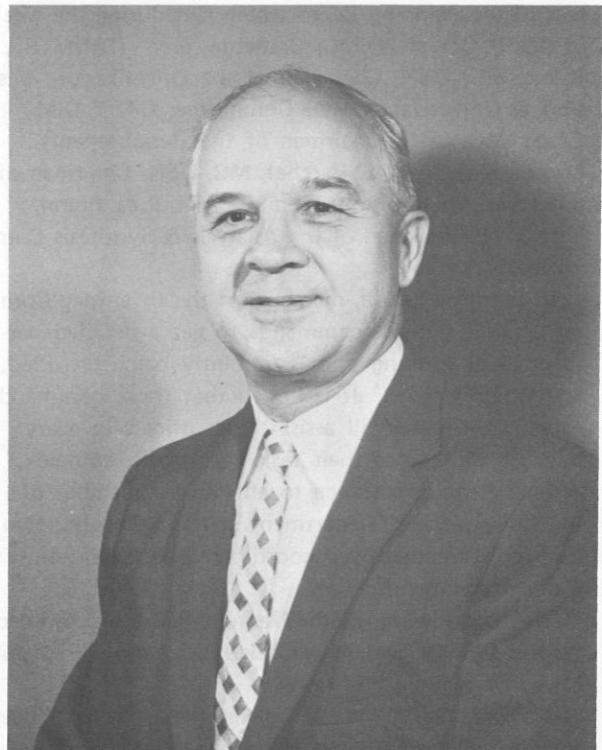
Associateship Office (JH 606)
National Research Council
2101 Constitution Avenue, N.W.
Washington, D.C. 20418

Applications must be postmarked not later than 15 Jan 1974. Supporting documents must be received by 12 Feb 1974. Inquiries cannot be processed after 5 Jan 1974.—Code 71D, BUMED. 

SUBMARINE AND DIVING MEDICINE BIBLIOGRAPHIES

The Biological Sciences Communication Project (BSCP) of the George Washington University Medical Center in the District of Columbia has completed another volume in the series of annotated bibliographies of work in submarine and diving medicine, which date back to 1948. The recently published *Underwater Medicine and Related Sciences, a Guide to the Literature*, edited by C.W. Shilling and M.F. Werts, contains citations and abstracts from almost every significant article, including some foreign translations, published in the field of underwater medicine during the years 1970 and 1971. The tremendous effort involved in these listings was expedited through a Termatrix storage program, which is compatible with modern-library information-retrieval systems. Contents are indexed by subject and by author. A microthesaurus of major headings is also included for the information of research workers, authors, and librarians.

Dr. Charles W. Shilling was the BSCP's first and continuing director from 1960 to 1 Jul 1972. He was Director, Research Division, BUMED, from Sep 1951



CO-EDITOR OF BIBLIOGRAPHIES.—CAPT C.W. Shilling, MC, USN (Ret.) was the founder and organizer of NSMRL in New London, Groton, Conn. (Photo by Army Photographic Agency, Washington, D.C.)

to Jun 1953, and was the founder and organizer of the Naval Submarine Medical Research Laboratory (NSMRL) in New London, Groton, Conn. He served as NSMRL's Commanding Officer from 1938 to 1947.

The work was supported under a contract from the Office of Naval Research and the U.S. Navy Bureau of Medicine and Surgery. Work is continuing on a future volume to cover current years.

UNDERWATER MEDICINE AND RELATED SCIENCES, A Guide to the Literature. Ed by Charles W. Shilling and Margaret F. Werts. New York, IFI/Plenum, 1973.—Code 71D, BUMED. ■

OPERATION CERA

One of the major problems confronting the medical profession in the United States today is keeping up with the latest findings in medicine. Some critics of the care we are dispensing have suggested forcing physicians to stay up-to-date in their fields by retesting for licensure every 3-5 years. Others, seeing the need for physicians to augment their education on a periodic basis have advocated association membership, licensing, and specialty recognition renewable annually, after the physician has attended so many hours of approved postgraduate education. To this end, several professional associations, state and local medical societies, and hospital-staff associations have set up as requirements for membership this type of continuing-education system. It has been well demonstrated by these organizations that such emphasis on continuing education is a significant factor in upgrading the health-care system.

In the Navy Medical Corps, there are various programs directed toward continuing-medical education. These are generally not very effective, in that funding, personnel, and available time are exceedingly variable and are usually in short supply; very little real graduate education results. Annual medical meetings are made available to some medical personnel; hospitals and dispensaries offer some degree of educational programs. Local programs tend to die out if they are not actively promoted. Participation in postgraduate education can be very hard work, but it is absolutely necessary if high-quality professional care is to be assured.

In the new Navy Regional Medical Clinic (NRMC), Pearl Harbor, over 75 hours of medical education are made available to each physician annually. These include weekly 1-2 hour lectures at each base, given by specialists from the civilian and military medical communities, and a 12-hour "Medical-Surgical Conference" sponsored jointly by the Region, the Hawaii Medical Association, and the University of Hawaii School of



CONGRATULATIONS.—CAPT Peter F. Wells, II, MC, USN (left) presents the first Continuing Education Recognition Award (CERA) to LT Thomas G. Cahill, MC, USNR at the Naval Regional Medical Clinic, Pearl Harbor.

Medicine. Several hours are also credited when a physician lectures to his coworkers. Similar courses have been set up for nurses and corpsmen.

The NRMC Pearl Harbor has decided that the efforts of medical personnel to keep up-to-date, by taking advantage of available programs should be rewarded, and so, CERA was born.

CERA is the Continuing Education Recognition Award. It will be presented annually to physicians who attend 50 hours of approved meetings, to nurses who attend 20 hours, and to corpsmen who attend 20 hours. The medical-education section will provide a sufficient number of local meetings so that attendance at 75% of the lectures will make one eligible for the CERA. Accordingly, all personnel are encouraged to take an active part in medical education, matching their civilian counterparts by remaining professionally current and competitive.

The Director of Medical Education at Naval Regional Medical Clinic Pearl Harbor, LCDR Harris S. Vernick, MC, USN reports that LT Thomas G. Cahill, MC, USNR earned more than the 50-required hours of credit, from July 1972 to June 1973, and became the recipient of the first CERA. More than 90% of the Regional physicians have earned this award, and CAPT Peter F. Wells, II, MC, USN, Director/Commanding Officer of the NRMC Pearl Harbor was proud to present each eligible officer with a CERA.

(This program suggests some very interesting possibilities. One cannot help but be impressed by the increasing number of Navy courses and symposia which are accredited by similar civilian professional programs sponsored by the AMA and state medical societies. NRMC Pearl Harbor is to be admired for exemplary initiative and spirit.—Ed.) ■

ARMED FORCES SEMINAR ON OB-GYN

The 22nd Annual Armed Forces Seminar on Obstetrics and Gynecology was held in conjunction with the 12th Annual Meeting of the Armed Forces District (AFD) of the American College of Obstetricians and Gynecologists (ACOG), on 16-21 Sep 1973 at Las Vegas, Nev. The USAF Medical Center Keesler (Keesler AFB, Miss.) hosted the affair.

Total registration exceeded 1050; out of 600 physicians, 136 Navy medical officers attended. A total number of 84 papers were presented by active and retired military obstetricians and gynecologists, and of



HOST AWARD.—LCDR K.E. Smith, MC, USN read his paper entitled "Gaucher's Disease and Pregnancy," honored as the best presentation from a military hospital. BG William A. Boyson, MC, USA (right) was the Armed Forces District Chairman.



HOECHST RESIDENT AWARD.—Second prize went to LCDR W.D. Daniel, MC, USN for his paper "Uterus Didelphys in Pregnancy: A Review."

this number, 24 were offered by Navy physicians. Three of the Navy participants received special recognition.

LCDR Kenneth E. Smith, MC, USN, a third-year Resident in obstetrics-gynecology at Nav Hosp San Diego, received the Host Award for his paper entitled, "Gaucher's Disease and Pregnancy." The highly instructive paper was based on an actual case treated at the Naval Hospital in San Diego, allegedly the 31st such case to be reported in the world.

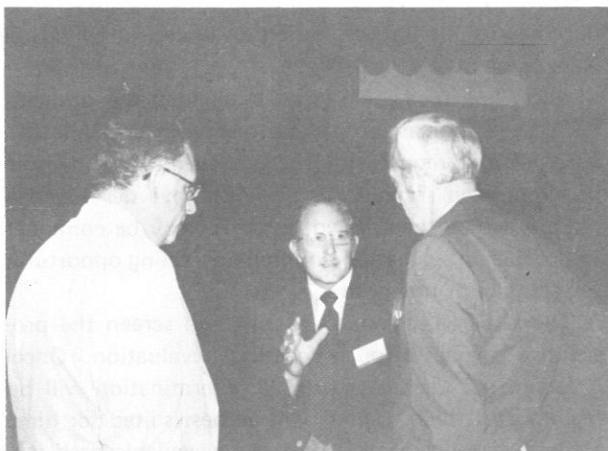
CDR Donald R. Tredway, MC, USN, a Fellow in Endocrinology at the Univ. of Southern California Medical Center, Department of Obstetrics and Gynecology, read his paper entitled, "Longitudinal Studies on Sperm Concentration in Human Cervical Mucus." Dr. Tredway's paper was judged the best clinical-research article in gynecology from a teaching hospital. It was exceptional.

LCDR William D. Daniel, MC, USN, from the OB-GYN Dept. at NNMC, Bethesda, Md., was awarded 2nd prize, the Hoechst Resident Award, for his paper "Uterus Didelphys in Pregnancy: A Review."

The Robert A. Ross Consultant Award for outstanding advancement in education and research is presented as a Navy Award by the Frederica/Pardue Company. Dr. George W. Mitchell, Jr., Professor and Chairman of the OB-GYN Dept. at the New England Medical Center in Boston, Mass., Tufts University School of Medicine, and Consultant to the Navy Surgeon General for Obstetrics and Gynecology, was the honored recipient of the Navy Consultant Award. Accepting this award for Dr. Mitchell was CAPT Robert K. Barton, MC, USN.



ROBERT A. ROSS CONSULTANT AWARD.—Accepting the Navy Award for the honored recipient Dr. George W. Mitchell, Jr., was CAPT Robert Barton, MC, USN.



HARD AT WORK.—CAPT Wendell A. Johnson, MC, USN (center), Director of Naval Reserve Division, BUMED, joined his colleagues at the meeting.

The National Naval Medical Center, Bethesda, Md., is to host the 23rd Annual Armed Forces Seminar on OB-GYN and the 13th Annual Meeting of the AFD of the ACOG, which will be held at the Statler-Hilton Hotel in Washington, D.C., on 3-8 Nov 1974. CAPT Douglas Knab, MC, USN, Chief of Obstetrics and



NAVAL RESERVE OFFICERS.—CAPT Johnson's medical-student forces pictured in conference are (from left to right): Dana Stombaugh, Junior at St. Louis; Jeffrey Lerch, Senior at Loyola; Richard Mruz, Senior at Loyola; and William Gruber, Senior at Loyola University Stritch School of Medicine.

Gynecology at the NNMC will be Program Chairman.
GO NAVY.

U.S. NAVY MEDICINE wishes to acknowledge the special efforts of Public Relations Director, Mrs. Dorothy A. Hadwick, and CAPT Robert K. Barton, MC, USN for making this material available for publication.—Ed.

PENSACOLA FREE CLINIC

Since 13 Mar 1973 Navy medical personnel including doctors, nurses and corpsmen, in their off-duty hours have been devoting two evenings a week to man a free clinic in the heart of a low income public-housing section of Pensacola.

A brain child of the pastor of St. Joseph's Church, Father Michael Mooney who furnished the building plus a great deal of time and assistance, and LT William Jackson, MC, USNR, Naval Hospital Pensacola, the Free Clinic is being well received by the local people.

Initially almost completely staffed by the Navy volunteers and Church assistants, it is now gaining the voluntary help of interested civilians. The Clinic is open at 5 PM Tuesdays and Thursdays, and closes its doors only after all of its patients have been seen. It has two well-equipped examining rooms, and it resembles a small dispensary. The Clinic welcomes patients of all faiths, creeds, and ethnic backgrounds.

Prior to commencing his three-year tour at the Naval Hospital, Dr. Jackson had worked with migrant-farm workers in his home state of Iowa. He had hopes of becoming involved in a similar community service during his stay in Pensacola. Fortunately, shortly after his arrival here, he met Father Mooney who held similar

ideas, and a vacant building in the heart of a public-housing area. After a few months of planning and organizing, the Clinic was born.

Largely subsidized by the local Catholic Charities Bureau and St. Joseph's Church, the nonsectarian and nondenominational clinic is gaining military and community support. In May the wives of Training-Wing Six collected \$500 for its use, and the local community has been generous in offering its resources for those cases requiring medical care beyond the scope of the Clinic. From six patients seen on the first night of operation, the patient load per evening has grown to exceed 20.

The Navy volunteers are paid by the smiles and the friendship of its clients, many of whom can ill afford medical expenses. One elderly man of 70 years sadly told staff members that they were the first "medics" to take the trouble to explain things to him.

Throughout the country, the military man and his wife take part in similar community-service programs, both medical and otherwise. The Armed Forces pride themselves on offering community assistance overseas and at home, and are disproving that old misguided impression that a military base is insulated from its civilian community. Dedication and involvement by

military personnel during their off-duty periods, and the talents and skills of their wives who find the time to work in such programs, strengthens the citizenship of the total community.—PAO, Nav Aerospace and Regional Medical Center, Pensacola, Fla. 

NAVAL DENTAL CENTER — PROJECT CREATE

Representatives of the Urban League, the National Alliance of Businessmen, and the Naval Dental Center, San Diego gathered here recently to sign an agreement assuring the Dental Center's participation in Project CREATE.

Project CREATE (Community Relations Employment Assistance Through Education) was recently established by the Urban League and several Navy activities. The program is designed to offer industry the opportunity to hire qualified and trained minority youths who have



AGREEMENT CEREMONY.—Signing the agreement between Naval Dental Center, San Diego, and Project CREATE, to train minority youths are (from left to right): Mr. Bernard Ashcraft, Employment Representative, San Diego Urban League, Inc.; RADM Anthony K. Kaires, DC, USN, CO, Naval Dental Center; and Mr. John Jacob, Executive Director, San Diego Urban League, Inc.

developed skills through varied resources, of which the Navy is one.

According to a joint letter explaining the project, "The need to assist youth and unemployed adults to develop skills required by the San Diego labor market has long been recognized. . . [We] have developed a plan by which their varied resources may be combined to provide an evaluation/counseling/training opportunity for some with this need."

The Urban League will recruit and screen the prospective trainees through vocational evaluation. Once a person has been evaluated, a determination will be made as to which training will be best suited for him. He will then be enrolled on a space-available basis in one of the Navy's training schools.

The Dental Center will be accepting one trainee per class; each class averages 100 military students. At the school, the trainees will go through the same routine as military students being tested and graded by the Navy. When they successfully complete the assigned training, trainees will be eligible for employment in the local area as dental assistants.



FIRST DENTAL TRAINEE.—In the cooperative effort of the Naval Dental Center and Project CREATE, to train minority youths for employment in the community, Miss Jeannie Davis (center) has become the first Naval Dental Center student. Adding their encouragement are: Mr. John E. Jacob (left), Executive Director of the San Diego Urban League, Inc.; and RADM A.K. Kaires, DC, USN (right), CO, Naval Dental Center, San Diego. 

LATE CLAIMS RESULT IN LATE PAYMENT

Beneficiaries of the Civilian Health and Medical Program of the Uniformed Services (CHAMPUS) have been penalizing their own pocketbooks by delaying submission of claims for reimbursement of authorized health care charges.

Normally, state CHAMPUS fiscal administrators strive to process claims within 15 working days of receipt. Delayed submission of claims involves charges that range from a few dollars to several thousands of dollars.—NAVNEWS, Washington, D.C. 

UNITED STATES NAVY MEDICINE

CORRESPONDENCE AND CONTRIBUTIONS from the field are welcomed and will be published as space permits, subject to editing and possible abridgment. All material should be submitted to the Editor, *U.S. NAVY MEDICINE*, Code 18, Bureau of Medicine and Surgery, Washington, D.C. 20372.

NOTICES should be received not later than the third day of the month preceding the desired month of publication.

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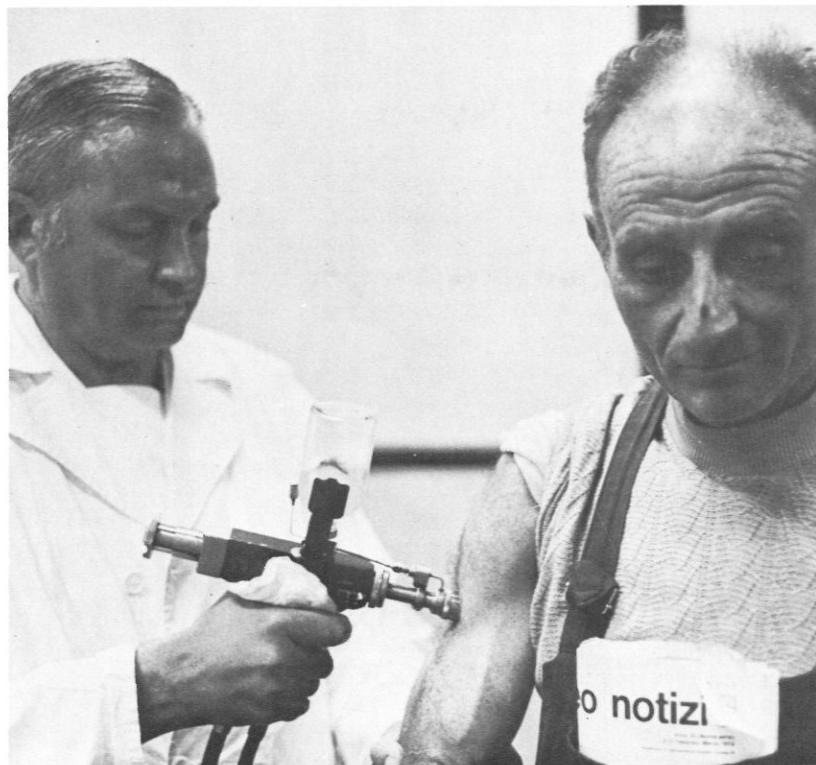
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SUGGESTIONS are invited concerning *U.S. NAVY MEDICINE*, its content and form.

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CANNONS FOR PEACE.—U.S. Navy medical personnel assisted Italian medical officials in providing mass cholera immunization programs throughout the city of Naples during the cholera outbreak. Italian health authorities employed the same jet-injection apparatus which has been used for mass immunizations by the U.S. Navy.

U.S. NAVY MEDICINE